

1. Advanced Features of Windows 10

EXERCISE



- A.** 1. a 2. a 3. a
- B.** 1. T 2. F 3. T 4. T
- C.** 1. Hardware and sound 2. Content 3. Partitions 4. Question mark
- D.** 1. File Explorer helps us organise and manage files and folders.
2. Asterisk (*) and Question mark (?)
- E.** 1. Asterisk is used to replace a string of characters in the search term. This implies that if we place an asterisk in our search term then Windows will search for a file name with the given characters and any other text string whereas Question mark replaces a single character or symbol. It represents only one character so it searches for only one character.
For example, if we type 'comp*' then it searches for files or folders beginning with 'comp' and displays like 'computer', or 'company', or 'Compile' etc. but if we type C?M in the search box of the File Explorer then it will display only files or folders whose names begin with three characters in which first and third characters are C and M.
2. We need to use wildcard for searching when we can't find a file in the computer or if we don't know its location or complete name. Wildcard is a special character which is used to represent one or more characters. Generally, two wildcard characters are commonly used for searching files in a system. These are asterisk(*) and question mark (?).
- F.** Appearance and Personalisation

IN THE LAB

Do yourself.



2. Charts in Excel

EXERCISE



- A.** 1. c 2. a 3. b 4. a
- B.** 1. Column chart 2. Legend 3. Scatter 4. Design
5. (This question was printed incorrectly in the book. Please correct it in your textbook.)
Q. Excel 2016 has some built-in _____.
Ans. chart styles
- C.** 1. F 2. F 3. T 4. T
- D.** 1. A chart is an effective way to display data in a pictorial form. It makes it easier to draw comparison and analyse the growth, relationship and trends among the values in a table.
2. Data series is related to the set of values. It is represented by the bars or slices that represent the data values.
3. Area chart displays the quantitative magnitude of the data graphically.
- E.** 1. Three components of a chart are:
(i) **Data Labels:** Data labels includes data values, category name, series name, legend keys and values from cells.
(ii) **X-axis:** X-axis is the horizontal axis of the chart. It is also called the category axis.
(iii) **Legend:** Legend is a key which shows the meanings of symbols and colours used in the chart.
2. (i) Column Chart displays the data in the form of vertical bars whereas bar chart displays the data in the form of horizontal bars.
(ii) In column chart, categories are on the horizontal axis and the values are represented on the vertical axis. In bar chart, categories are represented on the vertical axis and values are represented on the horizontal axis.
3. To create a chart, follow the given steps:
Step 1 Select the range of cells.
Step 2 Click on Column chart from Charts group under Insert tab from the drop-down list.
A chart will be inserted in the Excel sheet.
Step 3 Select a 2-D Column Chart option.
- F.** Pie Chart

IN THE LAB

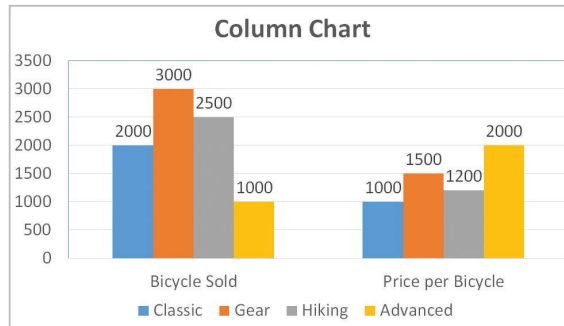
Do yourself.



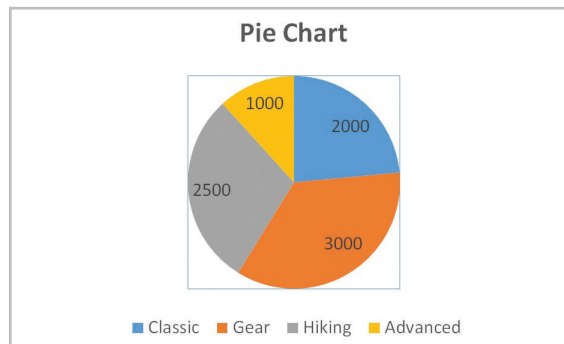
Periodic Assessment 1

(Based on chapters 1 & 2)

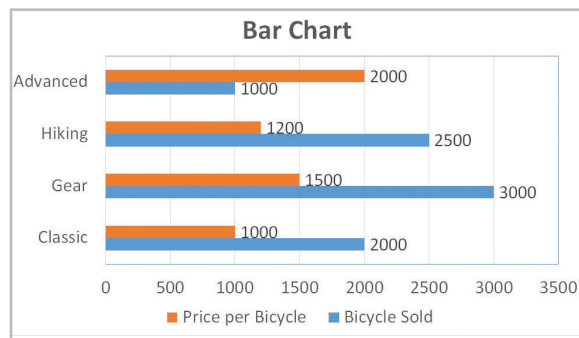
- A. 1. It is usually used to display the data in the form of vertical bars.



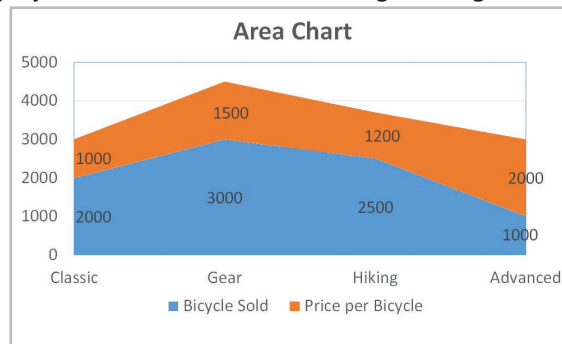
2. It is a circular chart divided into sectors where each sector shows the relative size of each value. It always shows only one data series.



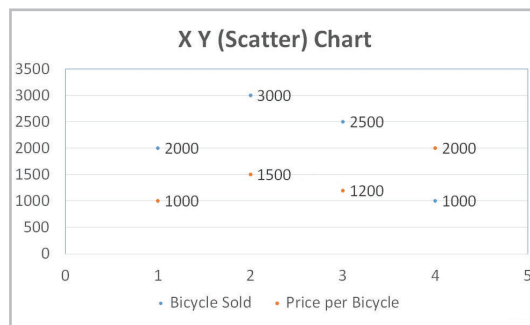
3. It is used to display the quantitative magnitude of the data graphically.



4. The bar chart displays the data in the form of long rectangular rods also called bars.



5. Scatter charts also known as XY scatter plot charts. They show the correlations between the two sets of values.



B. (This question was printed incorrectly in the book. Please correct it in your textbook.)

Q. Circle the odd one out.

1. Chart Area Legend Gridlines Design
2. Line Pie Labels Area
3. Small Icons File List Tiles
4. Wildcard Programs Clock and Region Network and Internet



Ans.

1.	Chart Area	Legend	Gridlines	Design
2.	Line	Pie	Labels	Area
3.	Small Icons	File	List	Tiles
4.	Wildcard	Programs	Clock and Region	Network and Internet

C. 1. c 2. d 3. b 4. e 5. a

3. Using Tools in GIMP

EXERCISE



- A.** 1. c 2. b 3. c 4. a
- B.** 1. F 2. T 3. T 4. F
- C.** 1. Rectangle Select 2. Text 3. Sharpen 4. Clone
- D.** 1. Fuzzy Select tool is used to detect the edges of the image automatically on the basis of colour codes and do the selection quickly.
2. Retouching tools help you to add or remove objects from an image.
3. Smudge tool is used to show the image as the wet paint on the image has been spread by a finger.
- E.** 1. Paintbrush tool is used to draw brush strokes to give an effect of painting to the image. The Paintbrush tool shows various options. For example, Opacity option is used to increase or decrease the transparency of the brush color. To use Opacity option:
- Step 1** Choose a colour for your Paintbrush by adjusting the gradient sliders.
- Step 2** Choose the type of Brush from the Brushes tab.
- Step 3** Click on the workspace and drag to draw the flow of brush.
2. To use Clone Tool, follow the given steps:
- Step 1** Open the image and then click on Clone Tool.
- Step 2** Select the brush size and hardness from Tool Options.
- Step 3** Press and hold the Ctrl key and click on the image to be cloned.

Step 4 Click and drag the mouse at the place where the clone is to be created.

3. To use Blur tool, follow the given steps:

Step 1 Open an image.

Step 2 Click Blur/Sharpen Tool.

Step 3 Select the brush size and hardness.

Step 4 Click and drag the mouse pointer over the area that you want to blur.

F. She should use Fuzzy Select tool and Crop tool.

IN THE LAB

Do yourself.

4. Advanced Features of GIMP

EXERCISE



- A.** 1. a 2. b 3. b 4. c
- B.** 1. F 2. F 3. F 4. T
- C.** 1. Eye 2. Tab 3. Copying, pasting 4. Filters
- D.** 1. Layers are transparent sheets which are stacked on top of each other so that individual objects of an image can be edited without affecting other objects.
2. Filters are tools which are used to modify an image in a variety of ways.
3. Hiding a layer means to make the layer temporarily invisible.
- E.** 1. Flattening layers means combining all the layers of an image to make one layer. To flatten layers, follow the given steps:
- Step 1** Select a layer which you want to flatten.
- Step 2** Right click on the Layers palette and select Flatten Image option.
2. To delete a layer, follow the given steps:
- Step 1** Select a layer from the Layers palette.
- Step 2** Click on the Delete layer button.
3. To apply filter to an image, follow the given steps:
- Step 1** Open an image in GIMP.
- Step 2** Select the part of the image where you want to apply the filter.
- Step 3** Click on the Filters menu from the menu bar.
- Step 4** Choose Blur filter from this submenu.



Step 5 Click on Gaussian Blur option.

Step 6 Increase the value of the X and Y size to decrease or increase the effect of the filter.

Step 7 After you have applied the suitable value to the filter, click on OK button to apply the effect.

F. 1. Layers

2. Merge two images

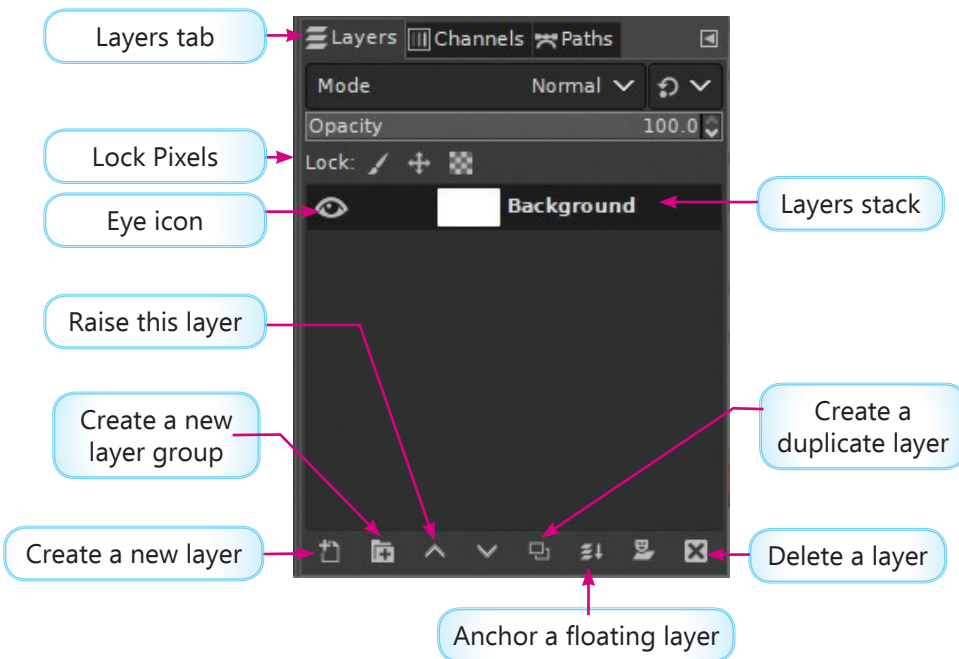
IN THE LAB

Do yourself.

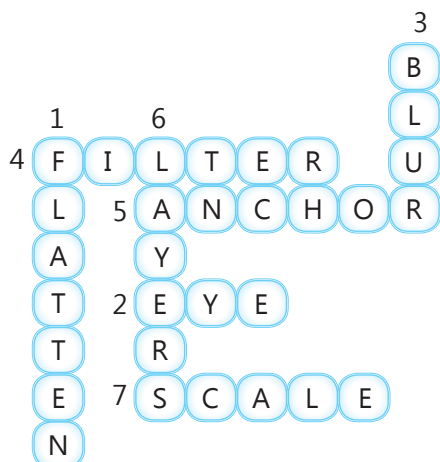
Periodic Assessment 2

(Based on chapters 3 & 4)

A.



B.



C. 1. Healing Tool 2. Clone Tool

Test Sheet 1

(Based on chapters 1 to 4)

Section A

- A. 1. (i) 2. (i) 3. (iii) 4. (i) 5. (iii)
6. (ii) 7. (ii) 8. (iii)

- B. 1. Eye 2. Tab 3. Sharpen 4. Clone

5. (This question was printed incorrectly in the book, please correct it in your textbook)

Q. Excel has some built-in _____.

Ans. Chart styles

6. Column 7. Partitions 8. Question mark

- C. 1. F 2. F 3. T 4. F 5. T
6. T 7. T 8. F

Section B

- A. 1. Hiding a layer means to make the layer temporarily invisible.
2. Retouching tools help you to add or remove objects from an image.
3. Area chart displays the quantitative magnitude of the data graphically.
4. The Appearance and Personalisation category of the Control Panel window is used to add new font into the computer.
5. Layers are transparent sheets which are stacked on top of each other so that individual objects of an image can be edited without affecting other objects.



- B.** 1. Flattening layers means combining all the layers of an image to make one layer. To flatten layers, follow the given steps:
- Step 1** Select a layer which you want to flatten.
 - Step 2** Right click on the Layers palette and select Flatten Image.
2. To use Clone Tool, follow the given steps:
- Step 1** Open the image and then click on Clone Tool.
 - Step 2** Select the brush size and hardness from Tool Options.
 - Step 3** Press and hold the Ctrl key and click on the image to be cloned.
 - Step 4** Click and drag the mouse at the place where the clone is to be created.
3. Steps to create a chart:
- Step 1** Select the range of cells.
 - Step 2** Click on Column chart from Charts group under Insert tab.
 - Step 3** Select a 2-D Column Chart option from the drop-down list. A chart will be inserted in the Excel sheet.
4. We need to use wildcard for searching when we can't find a file in the computer or if we don't know its location or complete name. Wildcard is a special character which is used to represent one or more characters. Generally, two wildcard characters are commonly used for searching files in a system. These are asterisk(*) and question mark (?).
5. To use Blur tool, follow the given steps:
- Step 1** Open an image.
 - Step 2** Click Blur/Sharpen Tool.
 - Step 3** Select the brush size and hardness.
 - Step 4** Click and drag the mouse pointer over the area that you want to blur.

5. Safeguarding your Computer

EXERCISE



- A.** 1. b 2. b 3. d
- B.** 1. F 2. F 3. F 4. T 5. T
- C.** 1. A malware is a type of malicious program designed to damage or carryout other unwanted actions on a computer system.
2. A computer virus is a program that is able to copy itself when it is run. It gets activated each time the program or file to which it is attached is opened or executed.



3. The two symptoms of an infected computer are:
 1. Change the file names or types automatically.
 2. Start displaying unusual messages on the screen.
- D.**
 1. a. A trojan horse is a dangerous virus. It represents itself as helpful software programs. Once the user clicks on it to agree to run it, it gains access to sensitive data and then modifies, blocks, or deletes the data. It cannot copy itself from one computer to another.
 - b. An adware tracks user's browser and download history and keeps popping advertisements on the screen.
 2. We can protect our system from Malware attack, with the given points:
 1. Download only legal software.
 2. Use the original version of windows.
 3. Scan Pen drive, CD and any other external storage device for viruses before opening in computer.
- E.**
 1. Scan the Pen Drive
 2. He should not open an infected E-mail

IN THE LAB

Do yourself.

6. Google Apps

EXERCISE



- A.**
 1. c
 2. a
 3. b
 4. a
 5. c
- B.**
 1. Sundar Pichai
 2. Encryption
 3. Share
 4. Map, 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.
 5. Google Docs is a free online word processing program. It is similar to Microsoft Word.



D. 1. Follow the below steps to open Google Docs:

Step 1 Click on the Google apps button. A drop-down menu appears.

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. A new blank document opens in a new tab or window.

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. Youtube is helpful in searching for any particular keyword and watch videos and to create playlists to organize videos and group videos together.

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. Follow these steps to share a spreadsheet:

Step 1 Click on the Share button from the top-right corner of the spreadsheet. The Share with people and groups pop-up box appears.

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. You can choose from Editor, Viewer or Commenter.

Step 5 Type a message for the receiver in the Message box.

Step 6 Click on the Send button to share the file.

Follow these steps to protect a spreadsheet:

Step 1 Select the Data Protected sheets and ranges option from the menu bar. The Protected sheets & ranges pane appears on the right. 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. The Range editing permissions pop-up box appears.

- E.** 1. View button 2. Google Maps
- F.** 1. Google Slides 2. YouTube 3. Google Sheets 4. Google Docs
5. Gmail 6. Map view 7. Google

IN THE LAB

Do yourself.

7. More on HTML 5

EXERCISE



- A.** 1. a 2. a 3. b 4. a
- B.** 1. Markup 2. Margin 3. <P> 4. <SUB> 5. <SUP>
- C.** 1. F 2. F 3. F 4. F 5. F
- D.** 1. HR tag is used when you want to divide your web page into different sections.
2. Text-indent property is used for indentation in HTML5.
3. The <SUP> tag is frequently used to write algebraic formulas.
- E.** 1. HR tag is used when you want to divide your web page into different sections.
The <HR> tag has following attributes:
- **WIDTH:** It displays the horizontal ruler of the specified width in pixels or in percentage.
<hr width="550"> or <hr width="80%">
 - **SIZE:** It controls the height or the thickness of the horizontal ruler.
<hr size="4">
 - **COLOR:** It is used to apply the background color.
<hr color="pink">
 - **ALIGN:** It is used to align the horizontal ruler left, right and center.
<hr align="right">
2. HTML provides the tag to change the certain properties such as font size, face and colour of a block of text on a web page. tag provides three attributes which you can use in the following way:
1. **FACE:** It allows you to set the font family such as Times New Roman, Verdana.
 Animation </p>
 2. **SIZE:** It allows you to set the font size.
 Animation </p>



3. COLOR: It allows you to set the font color.

font color="green"> Animation </p>

3. a. <SUB> tag is used to turn the enclosed text into a subscript. For example, H₂O is coded as H₂O

<SUP> tag is used to turn the enclosed text into a superscript. For example, E=mc² is coded as E=mc²

b. text-align Specifies the alignment of the text whereas text-indent Specifies the indentation of the first line of the text.

F. 1. <html> <title> <body bgcolor="green"> <h1 align=center> <hr> <p> <sup>

IN THE LAB

Do yourself.

Periodic Assessment 3

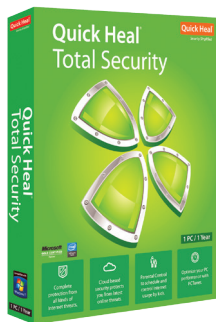
(Based on chapters 5 to 7)

- A. 1. THUMBS UP icon for 'Like' 2. Google Sheets
3. Google Maps 4. THUMBS DOWN icon for 'Dislike'

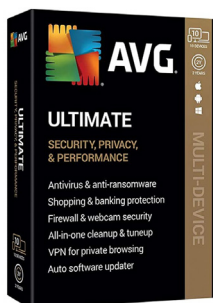
- B. • <body bgcolor="red">
• <p> will come in place of </p> at the starting of paragraph.
• Need to close the <p> at the end of the paragraph

C. (This question was printed incorrectly in the book, please correct it in your textbook)

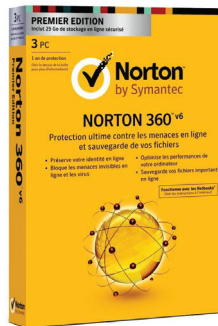
Q. Identify the following well-known antivirus programs:



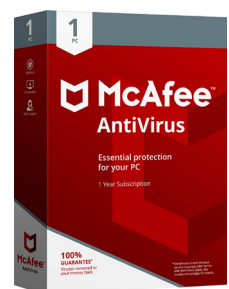
2.



3.



4.



Ans. 1. Quick Heal

2. AVG

3. Norton

4. McAfee

8. Conditional Statements in Python

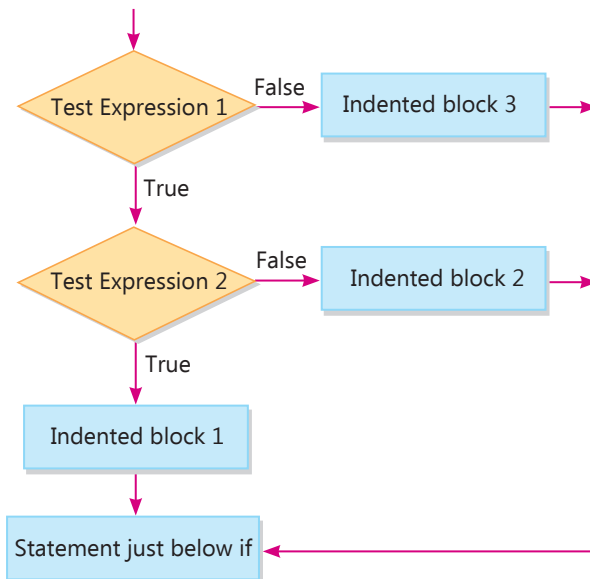
EXERCISE



- A.** 1. c 2. a 3. d 4. b 5. c
- B.** 1. if 2. true 3. false 4. else
- C.** 1. F 2. F 3. F 4. T 5. T
- 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 4  
3. if (Test Expression):  
    Indented statement block  
# if block ends here
```

E. 1.



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

F. 1. Enter a First Number: 15

Enter a Second Number: 25

Second number is greater than first number

The output of this question may vary according to the input.

2. Positive number

3. Above ten
and also about 20!

G. Conditional Statements

IN THE LAB

Do yourself.

9. AI for SDGs

EXERCISE



- A.** 1. b 2. a 3. b 4. c 5. a
6. b
- B.** 1. SDG 2. 70% 3. 17.2 4. Marine pollution
- C.** 1. T 2. T 3. F 4. T
- D.** 1. AI can help in improving the farming land, agriculture, quality of products, etc. AI can also help with aid distribution in poor and war-torn areas, or where natural disasters have caused heavy destruction.
2. AI can help in achieving this goal by increasing the ability of healthcare professionals to analyse huge data sets, providing better feedback and finding accurately the cause of diseases to discover the cure.
3. SDG 16 aims to guarantee justice and freedom for all people by 2030.
- E.** 1. It aims to ensure equal opportunities and end discrimination by eliminating discriminatory laws, policies and practices. AI may help in improving industrial growth thereby improving the global financial market and institutions.

2. AI for climate action has the potential to reduce global greenhouse gas emissions by up to 4 percent. Using AI and data from NASA, researchers are able to identify patterns and monitor changes of land surfaces such as decreasing sea area, ice cap surfaces, etc.
3. AI in education can be used to achieve Quality Education goals by developing smart content, providing personalized guidance, round the clock assistance, virtual learning environment and creating more secured online exams.

F. He can create a presentation in PowerPoint by relating the topic with SDG 15.

IN THE LAB

Do yourself.

Periodic Assessment 4

(Based on chapters 8 & 9)

- A.**
1. SDG 2 aims to end hunger issues by 2030 and ensure access to nutritious food for all children.
 2. SDG 5 aims to achieve gender equality and empower all women and girls.
 3. SDG 8 aims to lessen the youth unemployment.
 4. SDG 10 aims to ensure equal opportunities and end discrimination by eliminating discriminatory laws, policies and practices.
 5. SDG 15 aims at protecting, restoring and promoting the sustainable use of terrestrial ecosystems, managing forests, fighting deforestation, reversing land degradation and stopping biodiversity loss.

- B.**
1.

```
if (age > 18) :
    print('You are eligible to vote' )
else:
    print('Not eligible to vote')
```

Errors:

 - (i) In line 1, colon after if condition
 - (ii) In line 2, bracket close after print statement
 - (iii) In line 3, colon after else.
 2.

```
a = 200
b = 33
if (b > a):
    print("b is greater than a")
else:
    print("a is not greater than b")
```

Error:

 - (i) In line 3, bracket and colon after if condition



```

C. ch = input("Please enter a character : ")
if(ch == 'a' or ch == 'e' or ch == 'i' or ch == 'o' or ch == 'u' or
ch == 'A' or ch == 'E' or ch == 'I' or ch == 'O' or ch == 'U'):
    print('The given character is vowel')
else:
    print('The given character is not a vowel')

```

Test Sheet 2

(Based on chapters 5 to 9)

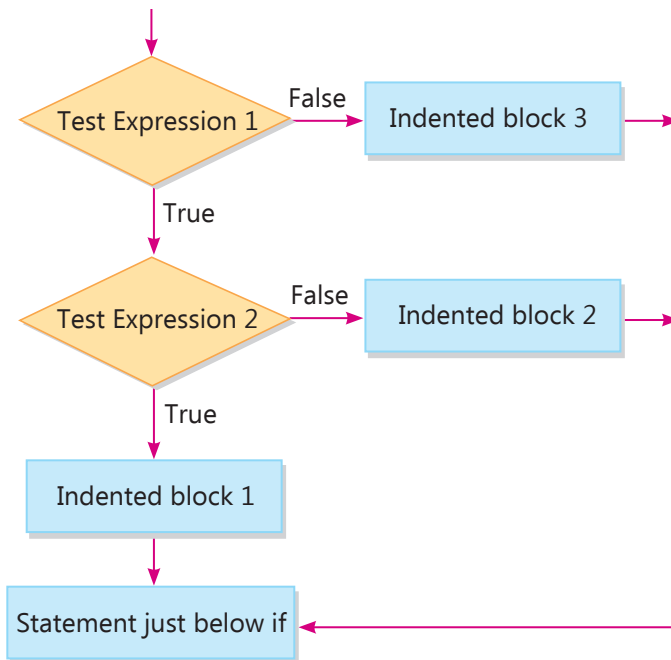
Section A

- | | | | | | |
|----|-------------------|---------------|---------------------|----------|---------|
| A. | 1. (ii) | 2. (ii) | 3. (ii) | 4. (i) | 5. (ii) |
| | 6. (i) | 7. (iii) | 8. (ii) | 9. (iii) | 10. (i) |
| B. | 1. Sundar Pichari | 2. Encryption | 3. <P> | 4. <SUB> | 5. else |
| | 6. True | 7. 17.2 | 8. Marine pollution | | |
| C. | 1. F | 2. F | 3. F | 4. F | 5. T |
| | 6. T | 7. F | 8. T | | |

Section B

- A.**
1. SDG 16 aims to guarantee justice and freedom for all people by 2030.
 2. Decision making in Python is done by called conditional statements which decide the flow of program execution.
 3. Text-indent property is used for indentation in HTML5.
 4. Google Docs is a free online word processing program. It is similar to Microsoft Word.
 5. A malware is a type of malicious program designed to damage or carryout other unwanted actions on a computer system.
- B.**
1. It aims to ensure equal opportunities and end discrimination by eliminating discriminatory laws, policies and practices. AI may help in improving industrial growth thereby improving the global financial market and institutions.

2.



3. HTML provides the tag to change the certain properties such as font size, face and colour of a block of text on a web page. tag provides three attributes which you can use in the following way:

a. FACE: It allows you to set the font family such as Times New Roman, Verdana.

```
<font face="Times New Roman"> Animation </p>
```

b. SIZE: It allows you to set the font size.

```
<font size="4"> Animation </p>
```

c. COLOR: It allows you to set the font color.

```
font color="green"> Animation </p>
```

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. Follow these steps to share a spreadsheet:

Step 1 Click on the Share button from the top-right corner of the spreadsheet. The Share with people and groups pop-up box appears.

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. You can choose from Editor, Viewer or Commenter.



Step 5 Type a message for the receiver in the Message box.

Step 6 Click on the Send button to share the file.

Follow these steps to protect a spreadsheet:

Step 1 Select the Data Protected sheets and ranges option from the menu bar. The Protected sheets & ranges pane appears on the right. 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. The Range editing permissions pop-up box appears.

5. We can protect our system from Malware attack, with the given points:

1. Download only legal software.
2. Use the original version of windows.
3. Scan Pen drive, CD and any other external storage device for viruses before opening in computer.