# ANSWER KEY

## Touchpad PLUS Ver 2.1

## 1. Advanced Features of PowerPoint 2016

**LET'S PLUG-IN** (Page no. 7)

1. T                   2. T                   3. F                   4. F

**LET'S CATCH UP** (Page no. 11)

1. a                   2. a

## TEST YOUR SKILLS

1.  a. (iii)          b. (i)          c. (ii)          d. (iii)          e. (i)

2.  a. Audio on my PC          b. Record

    c. Media, Insert          d. Action

3.  a. F          b. T          c. F          d. F

4.  a. If we select the Print All Slides option while printing, it will print all the slides in the presentation.

    b. Action buttons are some built in shapes which you can add to your slides. This action happens when you either click an object or hover your mouse over in a slideshow. It can open a web page, an e-mail, a linked file, slide in presentation, etc.

    c. Notes Page View is one of the presentation views available in Powerpoint. This view shows how your printed notes will appear. It also shows the speaker notes that you add to the Notes pane for each slide.

5.  a. To insert a video file, follow the steps given below:

    Step 1: Click on Video command under the Media group of the Insert tab.

    Step 2: Click on the Online Video option.

    Step 3: Search your video on the website.

    Step 4: Click on the Insert button.

    b. The printing options are:

    i. Print All slides       ii. Print Selection       iii. Print Current Slide

**LET'S SOLVE**

1.  a.  To insert recorded audio in a presentation, follow these steps:
        Step 1: Click on the Audio command in the Media group.
        Step 2: Click on the Record Audio option.
        Step 3: Enter the name of your audio clip and click on the Record button to start recording.
        Step 4: Click on the OK button.

    b.  To insert a video file, follow these steps:
        Step 1: Click on Video command under the Media group of the Insert tab.
        Step 2: Click on the Online Video option.
        Step 3: Search your video on the website.
        Step 4: Click on the Insert button.

2.  a.  Record Audio      b.  Online Video      c.  Print Selection

    d.  Print Current Slide                     e.  Action Button

**LET'S EXPLORE**

Do it yourself.

# 2. More on Excel 2016

**LET'S PLUG-IN** (Page no. 17)

1.  4 rows and 4 columns          2.  300          3.  109          4.  B4 & C3
5.  D4

**LET'S CATCH UP** (Page no. 28)

1.  T                 2.  T                 3.  F

## TEST YOUR SKILLS

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

2.  a. F             b.  T              c.  F            d.  T             e.  T

3.  a. Insert        b.  Cell Styles    c.  Select All   d.  Merge & Center   e. Operators

4. a. Yes, we can unmerge the merged cells. Name of command is Unmerge Cells.

   b. Copy command is used to copy the data at the new place while the data also exists at its original place.

   c. Wrap Text feature of Excel allows us to display multiple lines of text inside a cell.

5. a. Steps to wrap the text in a cell:

   Step 1: Click the cell in which you want to wrap the text.

   Step 2: Click on Wrap Text command from Alignment group under Home tab. The text in your cell will be wrapped.

   b. To change row height and column width follow these steps:
   Step 1: Select the column(s) or row(s) whose width or height you want to change.
   Step 2: Click on Format command in Cells group from Home tab.
   Step 3: Choose Column Width or Row Heights under Cell size.
   Step 4: In the Column Width or Row Height box, type the value that you want your column or row to be.

   c. To apply cell border follow these steps:
   Step 1: On a worksheet, select the cell or range of cells that you want to add a border to, change the border style on, or remove a border from.
   Step 2: Go to the Font group in the Home tab.
   Step 3: Click the arrow next to Borders command.
   Step 4: Click on the border style we would like.

## Fun Zone

### Let's Solve

1.

| A | W | B | S | P | L | I | T | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E | O | F | G | H | M | J | L | N | P | R | T | V | X |
| Y | R | A | N | G | E | A | D | E | R | T | U | I | P |
| B | K | R | S | P | R | E | A | D | S | H | E | E | T |
| N | S | F | R | T | G | O | I | T | R | E | Y | P | T |
| M | H | V | F | G | E | A | K | G | F | D | U | L | H |
| C | E | L | L | S | W | Z | L | F | V | C | I | H | B |
| K | E | E | C | H | S | X | M | V | F | T | I | J | F |
| L | T | D | X | B | A | C | N | B | G | G | O | N | N |

2. a. By using the Wrap Text command present on the Alignment group in the Home tab, Sonia can make the text visible.

b. By inserting a column, Anaya can create space to enter the marks.

**LET'S EXPLORE**

Do it yourself.

# Periodic Assessment–1

(Based on chapters 1 & 2)

**A.** 1. AutoFill feature automatically fills a series of data in your worksheet.

2. Action buttons are some builtin shapes which you can add to your slides. This action happens when you either click an object or hover your mouse over in a slideshow.

3. Combining two or more cells is known as Merging.

4. Selecting this option opens the Record Sound dialog box. Type a name for your audio. To record your voice, click on the Record button and speak. After recording, click on Stop button to stop the recording. To listen to your recording, click on Play button. If you are happy with your audio, click on OK button.

**B.** (**3**) Select **Nor Border** option.

(**1**) Go to the **Font** group in the **Home** tab.

(**2**) Click the arrow next to **Borders** command.

**C.** 1. Ritvik can use the Record Audio option.

2. Vansh can use the AutoFill option.

# 3. Formulas and Functions in Excel 2016

**LET'S PLUG-IN** (Page no. 34)

average marks and percentage is 90.

**LET'S CATCH UP** (Page no. 44)

1. 5            2. Comp            3. 7            4. 4/01/2021
5. 5            6. 3

1.  a. (i)             b. (i)             c. (ii)            d. (iii)           e. (iv)
2.  a. F               b. F               c. F               d. F               e. T
3.  a. Functions       b. Equal           c. square root     d. dollar ($)      e. MIN ()
4.  a. A cell reference is a cell address that can be used in a formula to denote a specific cell.
    b. TODAY() AND NOW()
    c. Relative cell referencing refers to a cell that is above or below and left or right to a number of rows or columns.
    d. It is used to return the sum of a range.
5.  a. It calculates the square root or absolute value of a number, product of numbers, etc.

    The names of two Mathematical functions are Sum(range) and Product (range).
    b. LEN function is used to return the length of the text string. For example: Input: =LEN("Touch") Output: 5
    c. There are mainly two ways to enter a formula in a worksheet:
        1. Typing the formula directly in the Cell: After typing an equal sign, enter the formula in the cell and press the Enter key. Result of the formula will appear in the cell.
        2. Typing the formula in the Formula bar: After selecting the cell, type the formula in the formula bar starting with equal sign and then press the Enter key.
    d. Rules to enter a function:
        1. All Excel functions must begin with = sign.
        2. Function name must be a valid Excel name.
        3. Function must be followed by opening and closing parenthesis.
        4. Most of the functions must contain an argument within it.
6.  a. SQRT: It returns the square root of the given number.
    b. DAY: It returns the current day.
    c. MOD: It returns the remainder after a number is divided by the divisor.
    d. INT: It rounds number to an integer value.
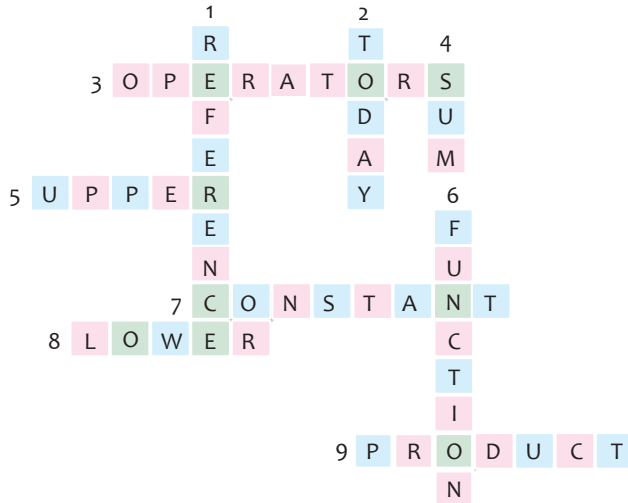    e. MIN: It returns the smallest value in the given range.

## FUN ZONE

### LET'S SOLVE

1.  Cell Reference

2.

| | | 1 | | | | 2 | | 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | R | | | | T | | S | | | |
| 3 O | P | E | R | A | T | O | R | S | | | |
| | | F | | | | D | | U | | | |
| | | E | | | | A | | M | | | |
| 5 U | P | P | E | R | | Y | | 6 | | | |
| | | E | | | | | | F | | | |
| | | N | | | | | | U | | | |
| | | 7 C | O | N | S | T | A | N | T | | |
| 8 L | O | W | E | R | | | | C | | | |
| | | | | | | | | T | | | |
| | | | | | | | | I | | | |
| | | | | 9 P | R | O | D | U | C | T | |
| | | | | | | | | N | | | |

LET'S EXPLORE

Do it yourself.

# 4. Introduction to Animate CC

LET'S PLUG-IN (Page no. 48)

Do it yourself.

LET'S CATCH UP (Page no. 54)

Fill refers to the inside of the object.

TEST YOUR SKILLS

1. a. (i)          b. (iv)          c. (ii)
2. a. Animation     b. HTML5      c. Stage        d. Lasso        e. Lines
3. a. Properties Panel displays the different properties of the object, which is selected.
   b. Gradient Fill is a combination of colours where one colour changes into another.
   c. There are three types of symbol in Animate CC: Movie Clip Symbol, Button Clip Symbol and Graphic Symbol.

4.  a.  i.  Selection tool is used to select objects on the stage for modification.

ii.  Pen tool is used to draw lines and curves by creating a series of dots that are automatically connected.

iii.  Free-transform tool is used to move, scale, rotate, skew, or distort objects.

b.  To create a symbol, perform the following steps:

Step 1: Click on the File → Open option from the menu bar. Select the desired file and click on the Open button.

Step 2: Select the Rectangle Tool from the Tools panel.

Step 3: Use the Stroke Color and Fill Color in the Properties panel to select the required outline and fill color from the color picker for the object.

Step 4: Click on the drawing mode in the Tools panel to select the Object Drawing mode.

Step 5: On the stage, draw a rectangle holding down the left mouse button.

Step 6: Click on the Selection Tool in Tools panel.

## FUN ZONE

### LET'S SOLVE

1.  a.  Outside the stage        b.  Sub – Select

2.

```
            1           2                   3
            W           P                   T
            E           A                   O    4
            L           S                   O    F
            C     5  T  I  M  E         L   I  N  E
     6  A D O  B     E                 S   L
            M           B                   P  E
            E           O    7  F  L  A
                        A                   N
                        R                   E
                        D                   L
```
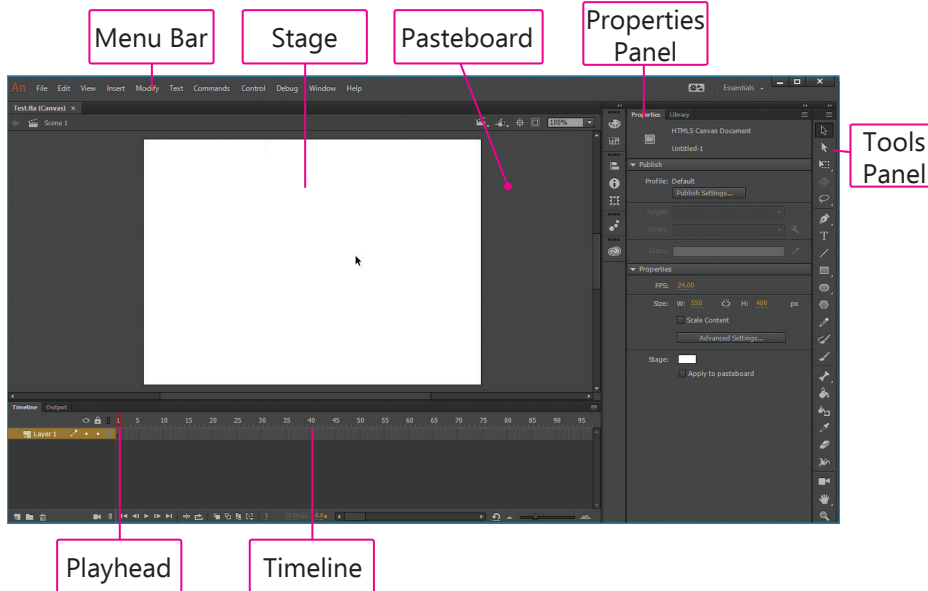
### LET'S EXPLORE

Do it yourself.

# Periodic Assessment–2

## (Based on chapters 3 & 4)

**A.**   1. Cell reference          2. Timeline          3. Functions
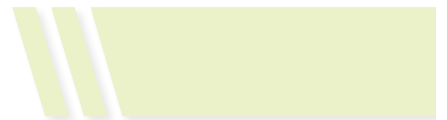
   4. Logical Function          5. Instance

**B.**



**C.**   1. 1. Movie Clip Symbol          2. NOW()

# Test Sheet–1

## (Based on chapters 1 to 4)

**A.**   1. (ii)          2. (i)          3. (iv)          4. (ii)          5. (i)

   6. (i)          7. (i)          8. (iv)

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

   6. F

**C.**   1. Audio on my PC   2. Record          3. Insert          4. Cell Styles

   5. dollar ($)          6. MIN ()          7. Stage          8. Lasso

**D.**   1. (c)          2. (a)          3. (b)          4. (d)

**E.**   1. If we select the Print All Slides option while printing, it will print all the slides in the presentation.

   2. Action buttons are some built in shapes which you can add to your slides. This action happens when you either click an object or hover your mouse over in a slideshow. It can open a web page, an e-mail, a linked file, slide in presentation, etc.

3.  Yes, we can unmerge the merged cells. Name of command is Unmerge Cells.
4.  Copy command is used to copy the data at the new place while the data also exists at its original place.
5.  Relative cell referencing refers to a cell that is above or below and left or right to a number of rows or columns.
6.  It is used to return the sum of a range.
7.  Gradient Fill is a combination of colours where one colour changes into another.
8.  There are three types of symbol in Animate CC: Movie Clip Symbol, Button Clip Symbol and Graphic Symbol.

**F.**  1.  To insert a video file, follow the steps given below:
    Step 1:  Click on Video command under the Media group of the Insert tab.
    Step 2:  Click on the Online Video option.
    Step 3:  Search your video on the website.
    Step 4:  Click on the Insert button.
2.  The printing options are:

    i. Print All slides        ii. Print Selection        iii. Print Current Slide

3.  To change row height and column width follow these steps:
    Step 1:   Select the column(s) or row(s) whose width or height you want to change.
    Step 2:  Click on Format command in Cells group from Home tab.
    Step 3:  Choose Column Width or Row Heights under Cell size.
    Step 4:  In the Column Width or Row Height box, type the value that you want your column or row to be.
4.  To apply cell border follow these steps:
    Step 1:  On a worksheet, select the cell or range of cells that you want to add a border to, change the border style on, or remove a border from.
    Step 2:  Go to the Font group in the Home tab.
    Step 3:  Click the arrow next to Borders command.
    Step 4:  Click on the border style we would like.
5.  There are mainly two ways to enter a formula in a worksheet:
    i.      Typing the formula directly in the Cell: After typing an equal sign, enter the formula in the cell and press the Enter key. Result of the formula will appear in the cell.
    ii.     Typing the formula in the Formula bar: After selecting the cell, type the formula in the formula bar starting with equal sign and then press the Enter key.
6.  To create a symbol, perform the following steps:

    Step 1:  Click on the File → Open option from the menu bar. Select the desired file and click on the Open button.
    Step 2:  Select the Rectangle Tool from the Tools panel.
    Step 3:  Use the Stroke Color and Fill Color in the Properties panel to select the required outline and fill color from the color picker for the object.
    Step 4:  Click on the drawing mode in the Tools panel to select the Object Drawing mode.
    Step 5:  On the stage, draw a rectangle holding down the left mouse button.
    Step 6:  Click on the Selection Tool in Tools panel.

# 5. Computer Malware

Do it yourself.

**LET'S CATCH UP** (Page no. 65)

1. (a)      2. (c)      3. (d)      4. (b)

## TEST YOUR SKILLS

1. a. (ii)      b. (iv)      c. (i)      d. (iv)      e. (iii)
2. a. Malware      b. Antivirus      c. Firewall      d. Trojan horse
3. a. F      b. F      c. F      d. T      e. T
4. a. The most commonly known categories of computer viruses are:
   - Program File Virus
   - Boot Sector Virus
   - Macro Virus
   - E-mail Virus

   b. A malware is a type of malicious program designed to damage or carryout other unwanted actions on a computer system.

   c. Some well-known antivirus programs are Norton, AVG, McAfee, Symantec, SmartDog, Kaspersky, etc.

5. a. • Download only legal software.
   - Don't open any unknown e-mail.
   - Don't open any e-mail attachment from unknown sources.
   - Don't download music, program or games from unknown sources on the Internet.
   - Install an antivirus program in your computer system.
   - Scan Pen Drive, CD and any other external storage device for viruses before opening in computer.

   b. A firewall is a Software or hardware-based network security system that controls the incoming and outgoing network traffic based on applied rule set. A firewall prevents unauthorised access to a computer network.

   c. i. The purpose of a trojan horse is to conceal itself inside the software that seems legitimate. When the software is installed on the system, the trojan gets activated and infects the host system.

   ii. ransomware is malicious software used to access the data of the host system illegally by encrypting it.

| A | I | I | B | A | C | K | D | O | O | R | I |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T | L | K | A | R | O | K | L | W | U | B | T |
| O | I | E | T | O | N | T | R | O | J | A | N |
| A | R | O | O | T | K | I | T | R | N | B | H |
| I | M | T | C | T | T | E | K | M | N | I | E |
| W | S | P | Y | W | A | R | E | M | Y | T | R |
| E | L | O | A | I | L | M | I | A | R | W | S |

# 6. Introduction to HTML5 and CSS3

**LET'S PLUG-IN** (Page no. 70)

1. Homepage    2. Website    3. Hyperlink    4. URL

## TEST YOUR SKILLS

1. a. (i)    b. (ii)    c. (i)    d. (ii)
2. a. Markup    b. Head    c. Block level    d. Empty    e. Nesting
3. a. HTML stands for Hypertext Markup Language. It is a markup language that describes the structure of the web page.
   b. The tags that include both opening and closing tags are called Container Tags.
   c. CSS handles and describes how a HTML web page will be presented on a web browser.
   d. The <Head> tag defines header area of your web page. The information given in <Head > tag tells the computer that this information is not to be shown on the web page.
4. a. The rules for writing HTML tags are:
   · Container tags should always be closed properly.
   · Values given to the attributes should be enclosed within the double quotes.
   · Tag name should not contain spaces.
   · There should be no spaces between < and > in a tag.
   · Tags must be nested correctly.

b. HTML editors are software which are used to write and edit HTML codes. There are mainly two types of HTML editors, WYSIWYG editor and Text Editor. The most commonly used HTML editors are Notepad and Notepad++.

c. An inline style is used to apply a unique style for a single element. The style attribute an element allows you to create and apply a style on the element. Syntax to create an inline style is:

<element style = "property1:value1; property2:value2; ... ....">

## FUN ZONE

### LET'S SOLVE

1.  a.  <Hn> tag

   b.  <Title> tag

2.



### LET'S EXPLORE

Do your self

### TECH PRACTICE

Do your self

## Periodic Assessment–3

(Based on chapters 5 & 6)

**A.**  TITLE            </HEAD>            <HTML>

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

**C.**  (2)  Click on Save button to save the file.

(3)  Click on Save to open Save As dialog box.

(4)  Choose the location where you want to save the file. In this case, Desktop is selected.

(5)  Enter name for the file as 'First Web Page.html'.

(1)  Click on File menu.

**D.**  1.  Computer Virus          2. antivirus software

# 7. Algorithm and Flowchart

**LET'S PLUG-IN** (Page no. 83)

ALERT MAJOR CYCLONE

**LET'S CATCH UP** (Page no. 88)

Precision, Uniqueness and Finiteness

## TEST YOUR SKILLS

1.  a. (iii)          b. (ii)          c. (ii)          d. (i)          e. (i)

2.  a. F          b. T          c. F          d. T          e. T

3.  a. Algorithm     b. Connectors     c. Consistent     d. two
    e. Flowchart

4.  a. An Algorithm is a set of steps in a sequential and ordered manner to solve any problem.

    b. A flowchart is a type of graphical diagram that represents an algorithm.

    c. (Start/Stop), Process, Decision, Input/Output, Flow Line (Arrow, Connector), Connector (Inspection)

    d. The construction of the Algorithm is the stage which requires creative thinking and finding the best possible combination of steps to get the result.

5.  a. You must follow these basic rules while drawing a flowchart:

    · The flowchart should be clear, neat and easy to follow.

    · Maintain the direction of the flow from left to right or top to bottom.

    · Only one flow line should come out from a process symbol.

    · Ensure that only one flow line should enter a decision symbol, but two flow lines should leave the decision box.

    · Ensure that the flowchart has a logical start and end.

b. The main characteristics of a good algorithm are:
  - **Precision:** Each step is precisely defined.
  - **Uniqueness:** Result of each step should be uniquely identified and only depend on the result of the preceding step.
  - **Finiteness:** It should stop after a finite number of instructions are executed.
  - **Input:** It should have well-defined input.
  - **Output:** It should have well-defined output.
  - **Effective:** It is measured in terms of time and space.

c. **Process symbol:** It is used to show a process or action step. This is the most common symbol used in flowcharts.

  **Input/Output:** It is used to represent the material or information entering or leaving the system, i.e., input and output.

## FUN ZONE

### LET'S SOLVE

1.　a.　(i) Input　　　　　　(ii) Process　　　(iii) Input

　　b.　Richa should make an algorithm before drawing a flowchart.

2.

| W | T | A | U | F | O | F | I | L | C | O | F | I | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R | V | D | E | L | R | E | T | I | U | R | E | T | I |
| B | A | L | G | O | R | I | T | H | M | N | D | R | N |
| W | I | N | D | W | W | S | O | R | O | W | S | O | T |
| T | N | O | R | C | W | S | W | J | D | W | S | W | E |
| E | T | L | L | H | D | I | H | B | E | O | I | H | R |
| X | E | U | I | A | E | H | E | K | P | L | H | E | P |
| T | R | M | N | R | C | O | N | N | E | C | T | O | R |
| Y | F | N | U | T | I | X | G | I | N | I | X | G | E |
| P | R | O | C | E | S | S | G | I | R | E | S | G | T |
| Y | C | N | P | R | I | S | G | I | R | E | S | G | E |
| Y | E | N | F | L | O | W | L | I | N | E | S | G | R |
| Y | E | N | P | R | N | C | O | M | P | I | L | E | R |

# 8. Introduction to Programming

1. T          2. T          3. T

Roll no = 201        Student Name = "Chirag"        Section = 'A'

## TEST YOUR SKILLS

1.   a. (ii)        b. (i)        c. (iv)        d. (iv)        e. (iv)

2.   a. Guido van Rossum        b. assignment        c. string        d. input()
      e. false

3.   a. T        b. F        c. F        d. T        e. T

4.   a. The value 8 is stored in the memory location named a.
   - b. Variables are memory reference points where we store values which can be accessed or changed later.
   - c. A data type specifies the type of value a variable can contains.
   - d. Precedence of operators determines the order in which the operators are executed.
   - e. Integrated Development and Learning Environment.

5.   a. Following are the relational operators provided by Python:
   ==    Equal to
   !=    Not equal
   >    Greater than
   <    Less than
   >=    Greater than or equal to
   <=    Less than or equal to

   For example, == operator: It checks if the values of two operands are equal or not. If yes, then the condition becomes true.

   - b. Comments in Python can be used to explain parts of the code. It can also be used to hide the code as well. Comments enable us to understand the way a program works. In python, any statement starting with # symbol is known as a comment.

   **Single Line Comment:** In case, a user wants to specify a single line comment, then comment must start with the symbol #.

   **Multiple-line Comment:** Python does not have a syntax for multiline comments. To add a multiple line comment, you could insert a # for each line.

c. Modes of Python IDLE are: Interactive Mode and Script Mode.

Interactive Mode is a command line shell which gives immediate result for each command.

The Script Mode saves the commands entered by the user in the form of a program.

d. (i) Arithmetic operators perform arithmetic operations between two operands.
Example (x=7 and y=3) Output 10

(ii) Comments in Python can be used to explain parts of the code. It can also be used to hide the code as well.

(iii) A data type specifies the type of value a variable can contains.

(iv) Variables are memory reference points where we store values which can be accessed or changed later.

(v) Logical operators are used to evaluate and decide.

e. (i) AND returns true, if both operands are true.
Example: (x < 5) and (x < 10). Output: TRUE.
OR returns true, if one of the operands is true.
Example: (x < 5) or (x < 2). Output: TRUE.

(ii) Modulus Operator divides left hand operand by right hand operand and returns remainder.
Example: x % y. Output: 1
Division Operator divides left hand operand by right hand operand.
Example: x / y. Output: 3.

(iii) In case, a user wants to specify a single line comment, then comment must start with the symbol **#**.

Example:

| **Program:** | **Output:** |
|---|---|
| # printing a string | Hello World |
| print("Hello world") | |

Python does not have a syntax for multiline comments. To add a multiple line comment, you could insert a **#** for each line.

Example:

| **Program :** | **Output :** |
|---|---|
| # printing a string | Hello World |
| #print five names | Rachna |
| print("Hello World") | Sambhav |
| print("Rachna") | Akshat |
| print("Sambhav") | Tushar |
| print("Akshat") | |
| print("Tushar") | |

# FUN ZONE

## LET'S SOLVE

1. 2.0      2. 12      3. 10 20 30      4. 6      5. 4

## LET'S EXPLORE

Do it yourself.

Do it yourself.

## 9. Intelligence and AI Approaches

**LET'S PLUG-IN** (Page no. 112)

Do it yourself.

**LET'S CATCH UP** (Page no. 114)

Do it yourself.

**LET'S CATCH UP** (Page no. 116)

Do it yourself.

## TEST YOUR SKILLS

1.  a. (iv)              b. (ii)              c. (i)              d. (ii)

2.  a. Interpersonal    b. Machine learning  c. virtual assistant  d. Intelligence    e. Howard

3.  a. T                b. F                 c. T                d. T

4.  a. Bodily-Kinesthetic Intelligence is being good at dancing and sports along with love creating things with their hands, tends to remember by doing, rather than hearing and seeing, and excellent hand-eye and physical coordination Flexible in different body movements and performing actions.

    b. A rule-based system uses rules as knowledge representation. These rules are coded in the system in the form of if-then-else statements which help the computer in taking decisions. The idea behind a rule-based system is to use the knowledge of a human expert in a specialised domain and embody it within the computer system.

    c. Intelligence refers to the ability to think, to learn from previous experience, to solve complex problems and to adapt new things and environment.

5.  a. A computer system that achieves AI through a machine learning technique is called a learning-based approach. This approach is often referred to as black boxes as it is not entirely clear how these systems take decisions.

    b. Verbal-Linguistic Intelligence people possess the following qualities:
    - Good at using words
    - Love reading and writing
    - Explain things well
    - Can remember written and spoken information
    - Good debaters
    - Use humour while telling stories

c.  Naturalistic Intelligence people possess the following qualities:
 · Nature lover
 · Love exploring the environment and learning about other species
 · Enjoy camping, gardening, hiking and exploring outdoors

# Periodic Assessment–4

### (Based on chapters 7 to 9)

**A.**   1. Start/Stop        2. Process            3. Decision            4. Input/output

**B.**   1. Variables are memory reference points where we store values which can be accessed or changed later. The names given to the variables are known as identifiers.
2. Operators can be defined as special symbols which perform arithmetic and logical computation.
3. The input() function takes the user's input while a program executes. The general syntax of the input() function is as follows:
   input([<prompt>])
4. The print() function prints or sends the output to the standard output device, which is usually a monitor. This function auto converts the items to strings.
   The general syntax of the print() function is as follows:
   print [<expression 1> , <expression 2>...]

**C.** 1. Existential Intelligence people possess the following qualities:
- Look at things from different point of view.
- Make connections between what is being learned and the world outside.
- Have a deep and comprehensive understanding not just of the universe, but of the self.

2. Naturalistic Intelligence people possess the following qualities:
- Nature lover
- Love exploring the environment and learning about other species
- Enjoy camping, gardening, hiking and exploring outdoors

**D.**
```
sub1 = int(input('Enter marks of the subject 1: '))
sub2 = int(input('Enter marks of the subject 2: '))
sub3 = int(input('Enter marks of the subject 3: '))
sub4 = int(input('Enter marks of the subject 4: '))
sub5 = int(input('Enter marks of the subject 5: '))
avg = (sub1 + sub2 + sub3 + sub4 + sub5)/5;
print('Average of marks is :', avg)
```

**E.** Naturalistic Intelligence

# Test Sheet–2

### (Based on chapters 6 to 9)

**A.** 1. (iv)  2. (i)  3. (i)  4. (ii)  5. (ii)
6. (i)  7. (iv)  8. (iv)  9. (i)

**B.** 1. firewall  2. trojan horse  3. Empty  4. Nesting
5. Connectors  6. Consistent  7. false

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

**D.** 1. A computer virus is a 'piece of code' or program developed to corrupt the data or program files stored on the computer system.
2.
3. HTML stands for Hypertext Markup Language. It is a markup language that describes the structure of the web page.
4. The tags that include both opening and closing tags are called Container Tags.
5. (Start/Stop), Process, Decision, Input/Output, Flow Line (Arrow, Connector), Connector (Inspection)
6. The construction of the Algorithm is the stage which requires creative thinking and finding the best possible combination of steps to get the result.

7. A data type specifies the type of value a variable can contains.
8. Precedence of operators determines the order in which the operators are executed.
E. 1. A malware is a type of malicious program designed to damage or carryout other unwanted actions on a computer system.
2. HTML editors are software which are used to write and edit HTML codes. There are mainly two types of HTML editors, WYSIWYG editor and Text Editor. The most commonly used HTML editors are Notepad and Notepad++.
3. This tag is commonly used to add heading to the content of the webpage. There are six levels of headings <H1>, <H2>, <H3>, <H4>, <H5>, <H6>.
4. You must follow these basic rules while drawing a flowchart:
   · The flowchart should be clear, neat and easy to follow.
   · Maintain the direction of the flow from left to right or top to bottom.
   · Only one flow line should come out from a process symbol.
   · Ensure that only one flow line should enter a decision symbol, but two flow lines should leave the decision box.
   · Ensure that the flowchart has a logical start and end.
5. The main characteristics of a good algorithm are:
   · **Precision:** Each step is precisely defined.
   · **Uniqueness:** Result of each step should be uniquely identified and only depend on the result of the preceding step.
   · **Finiteness:** It should stop after a finite number of instructions are executed.
   · **Input:** It should have well-defined input.
   · **Output:** It should have well-defined output.
   · **Effective:** It is measured in terms of time and space.
6. Following are the relational operators provided by Python:
   ==      Equal to
   !=      Not equal
   >      Greater than
   <      Less than
   >=      Greater than or equal to
   <=      Less than or equal to
   For example, == operator: It checks if the values of two operands are equal or not. If yes, then the condition becomes true.
7. Comments in Python can be used to explain parts of the code. It can also be used to hide the code as well. Comments enable us to understand the way a program works. In python, any statement starting with # symbol is known as a comment.
   **Single Line Comment:** In case, a user wants to specify a single line comment, then comment must start with the symbol #.
   **Multiple-line Comment:** Python does not have a syntax for multiline comments. To add a multiple line comment, you could insert a # for each line.