

## 1. PowerPoint 2019



### Take Off

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



### Double Tap

1. Remove button
2. Rotate left button
3. Increase brightness button
4. Decrease contrast button
5. Rotate right button
6. Decrease brightness button



### Choose the correct option.

1. a.                      2. a.                      3. b.                      4. c.



### Tick (✓) the correct statements and cross (×) the wrong ones.

1. ×                      2. ✓                      3. ×                      4. ✓



### Answer the following questions:

1. Insert button in Photo Album dialog box is used to insert pictures into the photo album.
2. To use Ink Equations feature, follow these steps:  
Step 1: Click on the Insert tab.  
Step 2: Click on the drop-down arrow of the Equation tool.

Step 3: Click on the Ink Equation option.

Step 4: Using finger/stylus/mouse pointer, write the equation in the Write math here box.

Step 5 Click on the Insert button.

3. Annotations are the comments and observations added by the presenter on the text / images forming part of the presentation.

To add annotations on a presentation, follow these steps:

Step 1: Click on the Slide Show tab.

Step 2: Check the Use Presenter View option.

Step 3: Start the slide show using From Beginning or From Current Slide tools to start the slide show.

Step 4: Click on Pen button to choose Pen from the pop-up menu.

4. The steps to use Smart Lookup feature in PowerPoint are:

Step 1: Click and drag the mouse pointer to select the word/phrase for which the meaning is to be searched.

Step 2: Right-click on the selected text/phrase.

Step 3: Click on the Search Lookup option to make a smart search.



## Scratch Your Brain.

1. a. Screen Recording      b. Ink Equations      c. Pen Tool      d. Ink Annotations

2. **Competency-based/Application-based questions:**

- a. I will ask Rohan to follow the steps given below:

Step 1: Click on the Insert tab.

Step 2: Click on the Photo Album tool from the Images group.

Step 3: Click on the File/Disk button.

Step 4: Click and select the photographs to be added to the photo album.

Step 5: Click on the Insert button.

Step 6: Click on the Create button.

- b. Geeta can use Ink Equations feature of PowerPoint.

## 2. More on Excel 2019



### Take Off

- a. 4 rows and 4 columns      b. 300      c. 109      d. B4 and C3      e. D4





## Double Tap

- a. F                      b. T



**Choose the correct option.**

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



**Tick (✓) the correct statements and cross (×) the wrong ones.**

1. ×                      2. ✓                      3. ×                      4. ✓



**Fill in the blanks with the correct words.**

1. Insert                      2. Cell Styles                      3. Select All                      4. Merge & Center



**Answer the following questions:**

1. Copy command is used to copy content at the new place and it also exists in its original place.
2. Wrap text feature of Excel allows us to add multiple lines of text inside a cell.
3. To insert a row in a worksheet, follow these steps:  
Step 1: Click the row heading where you want to add a row.  
Step 2: Click on Home tab.  
Step 3: Click on Insert command.  
Step 4: Select the Insert Sheet Rows option.
4. The steps to change the row height are:  
Step 1: Select the row(s) whose height you want to change.  
Step 2: Click on Home tab.  
Step 3: Click on Format command.  
Step 4: Choose Row Height.  
Step 5: Type the value that you want your row to be.  
Step 6: Click on OK button.
5. The steps to apply cell border are:  
Step 1: Select the cell or range of cells where you want to apply borders.  
Step 2: Click on Home tab.  
Step 3: Click the arrow next to Borders command.  
Step 4: Click on the border style you would like.





## Scratch Your Brain.

2.

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | B | 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. **Competency-based/Application-based questions:**
- Sonia can use Wrap Text feature of Excel.
  - Anaya can insert a row or column to enter those marks.

## Periodic Assessment–1

(Based on chapters 1 to 2)

- A.**
1. AutoFill: AutoFill feature automatically fills a series of data in your worksheet. It saves your time to complete the text or number series for you.
  2. Ink Annotations: Annotations are the comments and observations added by the presenter on the text / images forming part of the presentation. This helps the presenter to highlight and emphasize on the important points while giving a presentation.
  3. Merging Cells: While working on Excel you might need to combine some cells to show a part of data under one heading. Combining two or more cells is known as merging.
  4. Photo Album: The Photo Album feature of PowerPoint allows the user to create a slide show or presentation using the photographs or image files selected by the user. The Photo Album may be created for personal or professional use.
- B.**
- 4 Select unmerge cells option.
  - 3 Click on the arrow of the Merge & center command.
  - 1 Select the merged cells you want to split.
  - 2 Click on the Home tab.
- C.**
1. Photo Album: the Photo Album feature of PowerPoint allows the user to create a slide show or presentation using the photographs or image files selected by the user.



2. Screen Recording: powerpoint 2019 allows the user to record the action on the screen alongwith the audio and embed the recording into the pwerpoint presentation.
3. Ink Equations: the Ink Equations feature of the PowerPoint allows the user to write equations using finger or stylus (in case of touch screen) and mouse pointer (in other devices).
4. Stop Button: stop button is used to stop the screen recording and embed the recoded video into the slide.

### 3. Charts, Formulas and Functions in Excel



#### Take Off

Average marks are 90 and Percentage in the exams are 90%.



#### Double Tap

1. T                      2. T                      3. F



#### Double Tap

- a. 5                      b. Comp                      c. 7  
d. CURRENT SYSTEM DATE WILL BE DISPLAYED (Example: 19-04-2025)  
e. 5                      f. 3



#### Choose the correct option.

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



#### Tick (✓) the correct statements and cross (✗) the wrong ones.

1. ✗                      2. ✓                      3. ✗                      4. ✗                      5. ✓                      6. ✓



#### Fill in the blanks with the correct words.

1. Functions                      2. equal                      3. square root                      4. dollar(\$)                      5. MIN()



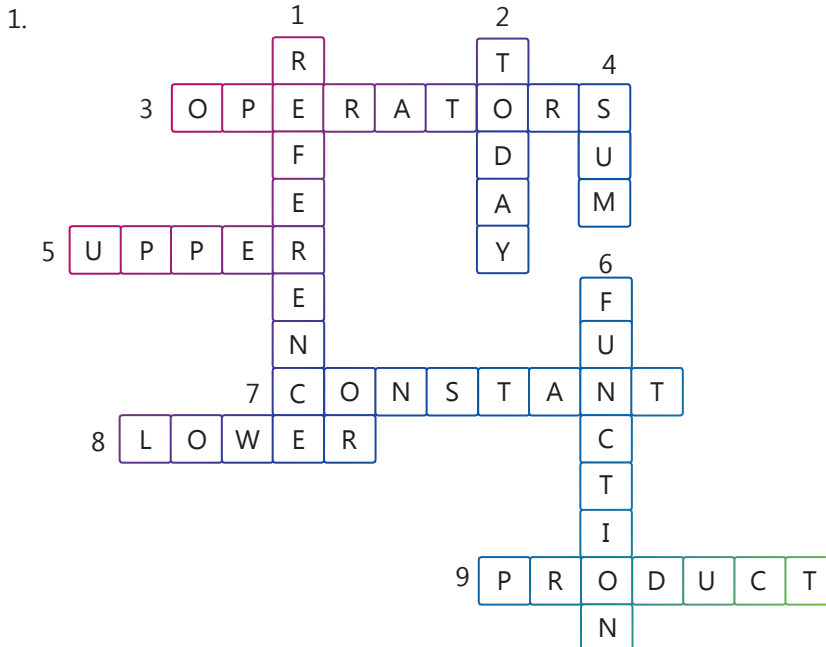


## Answer the following questions:

- Chart Title: It describes the main aim and content of the chart.  
Legend: It is a key which shows the meanings of symbols and colours used in the chart.
- A cell reference is a cell address that can be used in a formula to denote a specific cell.
- SUM() returns the sum of a range.
- Text functions are used to work on the characters entered as text.  
Two Mathematical functions are:  
Mod(number, divisor)– It returns the remainder after a number is divided by the divisor.  
Sqrt(number)– It returns the square root of the given number.
- IF Function checks whether the given condition met, and returns value1 if the condition evaluates to true, and returns value2 if the condition evaluates to false.  
For example:  
Percentage = 80  
Input: =IF(Percentage >= 50, "Passed", "Failed")  
Output: Passed
- The rules to enter a function are:
  - All Excel functions must begin with = sign.
  - Function name must be a valid Excel name.
  - Function must be followed by opening and closing parenthesis.
  - Most of the functions must contain an argument within it.



## Scratch Your Brain.



2. Competency-based/Application-based questions:

- a. Siya should use SUM Function.
- b. NOW()

## 4. Digital Drawing in Krita



### Take Off

Do it yourself.



### Double Tap

- a. Freehand Brush Tool
- b. Move Tool
- c. Rectangle Tool



### Choose the correct option.

- 1. c.
- 2. a.
- 3. b.
- 4. b.
- 5. Freehand Brush Tool



### Tick (✓) the correct statements and cross (✗) the wrong ones.

- 1. ✗
- 2. ✓
- 3. ✗
- 4. ✓
- 5. ✓



### Fill in the blanks with the correct words.

- 1. Opacity
- 2. Workspace
- 3. Letter Spacing
- 4. Anti-alias
- 5. Fill Patterns



### Answer the following questions:

- 1. Text Tool is used to type text on the image or the blank workspace.
- 2. Freehand Brush Tool is used to draw brush strokes to give an effect of painting to the image whereas the Fill Tool is used to fill color, gradient or pattern in a closed image and selected parts of an image.
- 3. Line Tool is used to draw a straight line.
- 4. The steps to import brushes in Krita are:
  - Step 1: Click on Settings.
  - Step 2: Click on Manage Resources.
  - Step 3: Click on a brush style.



Step 4: Click on Import Resources button.

Step 5: Click on Close button.

5. Fill Gradient creates a smooth transition between colors, while Fill Pattern applies a repeating design or texture over an area.
6. Krita is a popular graphics application developed and distributed by Krita Foundation. It is used for image creation and editing.



## Scratch Your Brain.

1.

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

2. Competency-based/Application-based questions:

- a. I would suggest my brother to use Rectangle Tool, Ellipse Tool, Polygon Tool and Line Tool.
- b. Maya can use Multibrush Tool.

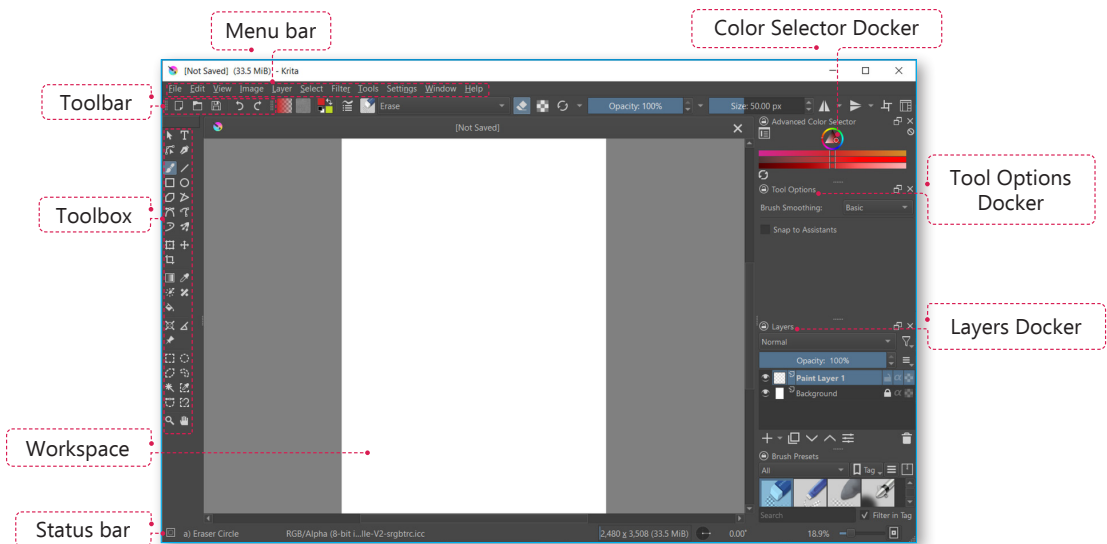
## Periodic Assessment–2

(Based on chapters 3 to 4)

- A.**
1. Cell reference
  2. Workspace
  3. Functions
  4. Logical Function
  5. Multibrush



**B.**



- C.**
1. Absolute References : If you wish to maintain the original references as they were, then you should make use of the absolute references.
  2. Mixed References : A mixed reference is a reference that refers to a specific row or column. It is basically a combination of relative and absolute references.
  3. Relative References: The relative reference makes the cells reference free. It gives the full function freedom to continue the order without restrictions.

## Test Sheet–1

(Based on chapters 1 to 4)

- A.**
- |       |       |       |        |        |        |
|-------|-------|-------|--------|--------|--------|
| 1. a. | 2. b. | 3. c. | 4. c.  | 5. a.  | 6. b.  |
| 7. b. | 8. c. | 9. d. | 10. a. | 11. b. | 12. c. |
- B.**
- |      |      |      |      |      |      |
|------|------|------|------|------|------|
| 1. ✓ | 2. ✓ | 3. x | 4. ✓ | 5. ✓ | 6. x |
| 7. ✓ | 8. x |      |      |      |      |
- C.**
1. The Photo Album feature of PowerPoint allows the user to create a slide show or presentation using the photographs or image files selected by the user.
  2. To edit a photo album open the photo album and follow these steps:  
 Step 1: Click on the Insert tab.  
 Step 2: Click on the drop-down arrow of the Photo Album tool.  
 Step 3: Click on the Edit Photo Album... option.  
 Step 4: Click on the checkbox to select the desired photos to edit.  
 Step 5: Click on the Update button to make the changes in the photo album.
  3. Copy command is used to copy content at the new place and it also exists in its original place.
  4. Wrap text feature of Excel allows us to add multiple lines of text inside a cell.
  5. SUM() returns the sum of a range.

6. Text functions are used to work on the characters entered as text.

Two Mathematical functions are: Mod(number, divisor), Sqrt(number).

7. Fill Gradient creates a smooth transition between colors, while Fill Pattern applies a repeating design or texture over an area.

8. Krita is a popular graphics application developed and distributed by Krita Foundation. It is used for image creation and editing.

Features of Krita allows us to manipulate, retouch, crop, resize and add colours to digital pictures to create posters, banners, brochures, etc.

## 5. Introduction to HTML5 & CSS3



### Take Off

- a. Home Page      b. Website      c. Hyperlink      d. URL



### Choose the correct option.

1. a.                      2. b.                      3. a.                      4. b.



### Fill in the blanks with the correct words.

1. Markup              2. Head              3. Block              4. Empty              5. Nesting



### Answer the following questions:

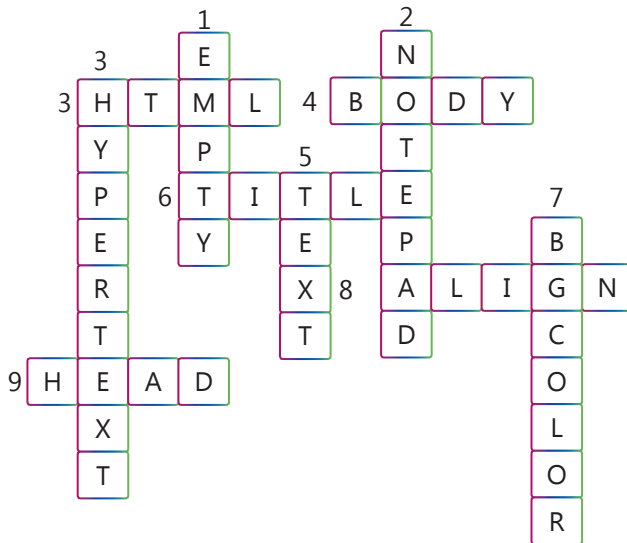
1. HTML stands for Hypertext Markup Language. It is a markup language that describes the structure of the web page. The latest version of HTML is HTML5 which was released in 2008.
2. The tags that have both opening and closing tags are called Container Tags.
3. An external style sheet in HTML5 is used to separate the content (HTML) from the presentation (CSS). It allows you to define the styling rules in a separate CSS file, which can then be linked to one or more HTML pages.
4. 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.





## Scratch Your Brain.

1.



2. Competency-based/Application-based questions:

- Ajit should use <HEAD> Tag to add headings to his web page. The <h1> tag is used for the main heading, and the subsequent numbers (e.g., <h2>, <h3>) are used for subheadings.
- I would suggest Anjali to use <TITLE> Tag to her web page.

## 6. Internet Services



### Take Off

- Facebook
- Twitter
- Instagram
- YouTube



### Double Tap

- Quora
- Twitter
- Facebook
- Skype



### Choose the correct option.

- a.
- a.
- d.
- d.
- b.





Tick (✓) the correct statements and cross (✗) the wrong ones.

1. ✗                      2. ✗                      3. ✓                      4. ✗



Fill in the blanks with the correct words.

1. cash on delivery                      2. communicate, information  
3. Facebook                      4. blogger                      5. questions                      6. cloud storage



Answer the following questions:

1. Two things that you cannot share on Quora are:
  - You cannot argue on any topic or raise a conflict.
  - Questions which are poorly phrased or are not appropriate are not entertained on the website.
2. Two risks of using cloud computing are:
  - Your sensitive data might be at risk from hackers.
  - Some people might face issues like data loss.
3. Blog is a short form of WEBLOG, which refers to a website where new information about any topic is updated regularly.  
Two types of blogs are:
  - Food Blog
  - Travel Blog
4. RSS feed fetches the updated web feed or newly published information from the website/blog directly to you. So, you do not have to search for updated information again and again.
5. A blog is based on the idea of the orderly release of new content to attract a crowd, whereas a website is a collection of static pages such as the home page, the contact page, and the profile page.



Scratch Your Brain.

1.



Blogger



OneDrive



RSS Feed



GooglePay

2. Competency-based/Application-based questions:

- a. Shreya and her group can use Cloud Computing.
- b. Riham can use Facebook to get in touch with his classmates.



## Periodic Assessment–3

(Based on chapters 5 & 6)

- A. TITLE                      </HEAD>                      </HTML>
- B.  Click on Save button to save the file.  
 Click on Save to open Save As dialog box.  
 Choose the location where you want to save the file like Desktop.  
 Enter name for the file as 'First Web Page.html'.  
 Click on File menu.
- C. 1. Google Drive   2. Paytm                      3. Debit Card      4. Facebook      5. blogger.com
- D. 1. The text level tags are used to mark up parts of the text.  
2. These Tags contain only opening tag.  
3. This is a property that provides some additional information about a tag.  
4. The block level tags take up the full width available and by default begin on a new line.  
5. The tags that have both opening and closing tags.

## 7. Algorithmic Intelligence



**Take Off**

Message:

|   |    |   |    |    |    |    |   |    |    |    |    |   |    |   |    |    |    |   |
|---|----|---|----|----|----|----|---|----|----|----|----|---|----|---|----|----|----|---|
| 1 | 12 | 5 | 18 | 20 | 27 | 13 | 1 | 10 | 15 | 18 | 27 | 3 | 25 | 3 | 12 | 15 | 14 | 5 |
| A | L  | E | R  | T  |    | M  | A | J  | O  | R  |    | C | Y  | C | L  | O  | N  | E |



**Double Tap**

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



**Choose the correct option.**

1. c.                      2. b.                      3. b.





Tick (✓) the correct statements and cross (✗) the wrong ones.

1. ✗

2. ✓

3. ✓

4. ✓

5. ✗



Answer the following questions:

1. An algorithm is a set of steps in a sequential manner to solve a problem or to complete a task.
2. A flowchart is a type of graphical diagram that represents an algorithm.
3. Two symbols used in flowchart are:
  - Oval/Start or Stop- It is used to show the start and stop points of the flowchart. It usually contains the words 'Start' or 'Stop'.
  - Rectangle/Process- It shows a process or action step.
4. Algorithm to copy and paste a paragraph in Word is given below:
 

Step 1: Start.

Step 2: Select the paragraph to copy.

Step 3: Click on copy command or press Ctrl+C.

Step 4: Click at the location where you want to paste the paragraph.

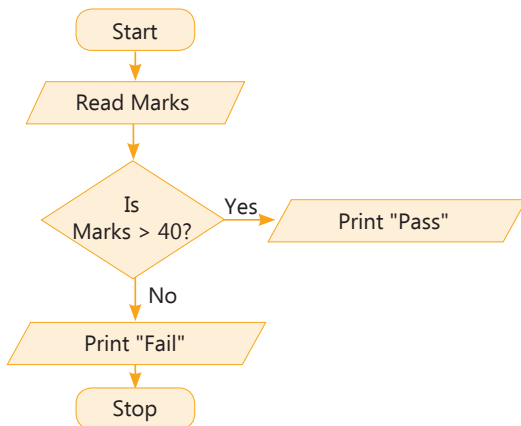
Step 5: Click on paste command or press Ctrl+V.

Step 6: End.



Scratch Your Brain.

1.



2. Competency-based/Application-based questions:

a. i. Parallelogram

ii. Rectangle

iii. Parallelogram

b. She should make an algorithm before drawing the flowchart.



14

Plus (Ver. 4.0)-VI (Answer Key)



## 8. Introduction to Programming



### Take Off

1. F                      2. T                      3. T



### Double Tap

1. BASIC                      2. PASCAL                      3. FORTRAN



### Choose the correct option.

1. a.                      2. b.                      3. a.                      4. b.



### Tick (✓) the correct statements and cross (✗) the wrong ones.

1. ✓                      2. ✗                      3. ✓                      4. ✓



### Answer the following questions:

1. To communicate with the computers, we need some special languages which are called computer languages or programming languages.
2. High-level language is user friendly and easier to maintain.
3. A language translator is a software that converts a high-level language program into a machine language.
4. A low-level language is a programming language that is machine dependent.

There are two types of low-level languages:

- Machine Language : Machine language is the only language understood by the computer. It is also known as the first generation language (1GL).
  - Assembly Language: Assembly language is also known as second generation language (2GL). It is the language in which program codes are written in the form of alphanumeric symbols called 'Mnemonics' instead of 0 and 1.
5. Compiler converts the entire high-level language program into machine language at once whereas, an interpreter converts the entire source program into machine language line by line.



### Scratch Your Brain.

1. Do it yourself.



2. **Competency-based/Application-based questions:**

- Fourth Generation Language
- Interpreter

## 9. Python



### Take Off

- A low-level language is a programming language that is machine dependent, whereas High-level language is a programming language that enables a programmer to write programs that are machine independent.
- Python is a high-level programming language.
- Perl and JavaScript are programming languages that are similar to Python.



### Double Tap

- Python
- Interactive Mode
- Script Mode
- Save option
- Run Module button



### Double Tap

Roll no = 201

Student Name = "Chirag"

Section = 'A'



### Choose the correct option.

- b
- a
- d
- d
- d



### Tick (✓) the correct statements and cross (✗) the wrong ones.

- ✓
- ✗
- ✓
- ✓
- ✓



### Answer the following questions:

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



2. A data type specifies the type of value a variable can contains.
3. IDLE stands for Integrated Development and Learning Environment.
4. Hello! How are you?
5. a. 5                      b. 32782.0
6. a. AND returns true, if both operands are true, whereas OR returns true, if one of the operands is true.  
     b. Modulus Operator divides left hand operand by right hand operand and returns remainder, whereas Division Operator divides left hand operand by right hand operand.  
     c. In Single-line Comment, a user wants to specify a single-line comment, then comment must start with the symbol #, whereas Python does not have a syntax for multi-line comments. To add a multiple-line comment, you could insert a # for each line, however, the text written inside triple quotes (" or ''') is also considered as comment.



## Scratch Your Brain.

1. a. 2.0  
     b. 12  
     c. 10 20 30  
     d. 6  
     e. 4  
     True
2. a. print ("Sum is ", sum)  
     b. print('Orange Education') #Adding Value to Education
3. Do it Yourself.
4. **Competency-based/Application-based questions:**  
     a. Sonam will use comment feature of Python.  
     b. I will suggest him to use Interactive mode.

# 10. Intelligence and AI Approaches



## Take Off

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| E | A | R | P | H | O | N | E |
|---|---|---|---|---|---|---|---|



## Double Tap

Do it yourself.





## Choose the correct option.

1. c.                      2. b.                      3. a.                      4. b.



## Fill in the blanks with the correct words.

1. interpersonal                      2. machine learning                      3. virtual assistant  
4. intelligence                      5. Howard



## Tick (✓) the correct statements and cross (✗) the wrong ones.

1. ✓                      2. ✗                      3. ✓                      4. ✓



## Answer the following questions:

- These people possess the following qualities:
  - Good at dancing and sports
  - Love creating things with their hands
  - Tend to remember by doing, rather than hearing and seeing
  - Excellent hand-eye and physical coordination
  - Flexible in different body movements and performing actions
- 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.
- Intelligence refers to the ability to think, to learn from previous experience, to solve complex problems and to adapt new things and environment.
- 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. This is a major problem for applications when it comes to making a decision for investment, medical or military reasons as this approach remains unreliable.
- These people possess the following qualities:
  - Nature lover
  - Love exploring the environment
  - Learning about other species
  - Enjoy camping, gardening, hiking and exploring outdoors



## Scratch Your Brain.

1. a. 64                      b. 141                      c. Linguistic Intelligence

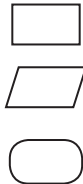
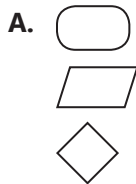


2. **Competency-based/Application-based questions:**

- a. Naturalistic Intelligence
- b. Interpersonal Intelligence

## Periodic Assessment–4

(Based on chapters 7 & 10)



- B.** 1. Variables are memory reference points where we store values which can be accessed or changed later.  
2. In Python, operators can be defined as special symbols which perform arithmetic and logical computation.  
3. This takes the user's input while a program executes.  
4. This prints or sends the output to the standard output device, which is usually a monitor.

- C.** 1. Have a deep and comprehensive understanding not just of the universe, but of the self.  
2. Love exploring the environment and learning about other species

- D.** #To accept the marks of five subjects (out of 100) from the user and calculate the average.

```
a = int(input("Enter the marks in first subject: "))  
b = int(input("Enter the marks in second subject: "))  
c = int(input("Enter the marks in third subject: "))  
d = int(input("Enter the marks in fourth subject: "))  
e = int(input("Enter the marks in fifth subject: "))  
total = a+b+c+d+e  
avg = total/5  
print("Average marks: ", avg)
```

## Test Sheet–2

(Based on chapters 5 to 10)

- |                 |       |       |        |        |        |
|-----------------|-------|-------|--------|--------|--------|
| <b>A.</b> 1. b. | 2. a. | 3. a  | 4. a.  | 5. b.  | 6. d.  |
| 7. a.           | 8. b. | 9. a. | 10. d. | 11. a. | 12. b. |
| <b>B.</b> 1. x  | 2. x  | 3. ✓  | 4. ✓   | 5. ✓   | 6. x   |
| 7. ✓            | 8. ✓  |       |        |        |        |



- C. 1. 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.
2. The key features of Skype are as follows:
- Skype translates the conversation in real-time if the person is talking in a different language.
  - It is a safe way to have conversation with people without any interruption.
  - You can share your screen to train someone.
  - It has Live Subtitles option. This helps a hearing-impaired person to keep up with the call.
3. RSS feed fetches the updated web feed or newly published information from the website/blog directly to you. So, you do not have to search for updated information again and again.
4. An algorithm is a set of steps in a sequential manner to solve a problem or to complete a task.
5. A language translator is a software that converts a high-level language program into a machine language.
6. Data types specify the type of value a variable can contain.
7. IDLE stands for Integrated Development and Learning Environment.
8. Intelligence refers to the ability to think, to learn from previous experience, to solve complex problems and to adapt new things and environment.

