# 1. Hardware and Software

## Quiz Bee
Page-11

1. CPU (Central Processing Unit)
2. The keyboard is used to give input to the computer by typing numbers, letters and special characters.

## ASSESS YOURSELF

1. a. (iii)          b. (ii)          c. (iii)          d. (iii)
2. a. F          b. F          c. T          d. F
3. a. (iii)          b. (i)          c. (ii)          d. (iv)
4. a. The CPU is located inside the CPU box/cabinet of a computer.

b.

| Hardware | Software |
|---|---|
| Hardware are the tangible parts of a computer system that we can see and touch. | Hardware requires instructions to perform tasks. A set of instructions is called a program, and a collection of programs is called software. |
| Example: Keyboard, mouse, etc. | Example: System Software, Application Software |

c. Some storage devices are Hard disk, Compact disc (CD), Digital Versatile disc (DVD), Pen drive, etc.

d. A computer works in three steps: Input → Process → Output (IPO). This is also called the IPO cycle. Here,

- Input means the data and instructions entered into the computer.
- Process means conversion of data into information.
- Output means the result achieved after processing of data.

5.  a. Raj should use Word to write a story.

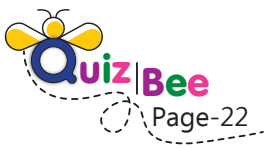b. Zara should use joystick to control the game.



**{CODING ZONE}**

1, 2, 3, 4, 9

1, 2, 4, 9

1, 2, 5, 9

1, 2, 5, 4, 9

1, 2, 5, 6, 9

1, 2, 5, 6, 7, 9

1, 2, 5, 6, 7, 8, 9

# 2. Windows 11—An Introduction



**QuizBee** Page-22

1.  The full form of GUI is Graphical User Interface.

2.  Taskbar is one of the components of the desktop.

## ASSESS YOURSELF

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

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

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

4.  a. Any two components of the taskbar are:

(i) Start button: It appears in the middle of the taskbar in Windows 11. When we click on it, a menu appears known as the Start Menu.

(ii) Notification area: It is located at the right corner of the Taskbar. It displays time, date, Internet connection, etc.

b. Any two features of Windows 11 is:

(i) It is a user-friendly operating system.

(ii) It has a GUI which means you do not need to remember all the commands.

c. (i) This PC

(ii) Recycle Bin

5. a. The steps to change the desktop background are:

    **1** Right-click on the desktop and choose Personalize option.

    **2** Click on the Background option.

    **3** Select any picture.

    After choosing a picture, the background will change automatically.

   b. You would use the Search button on your computer to find the document by typing its name.

{CODING ZONE}

1. SDZBGDQ

2. (iv)

## PERIODIC ASSESSMENT 1

### (Based on chapters 1 & 2)

1.    a. Joystick      b. Microphone      c. Laser Printer      d. Monitor      e. Speakers

    f. Pen Drive

2.   **3** Switch the Set time automatically option to off in the Date & time settings.

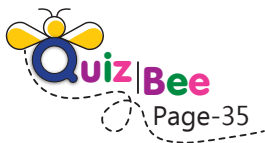    **1** Right-click on the Clock.

    **4** Click on Change option to set the date and time manually.

    **2** Click on Adjust date and time option.

3. a. Anaya should use MS Word to type a letter on the computer.

   b. Arnika should use speakers to hear music on the computer.

# 3. Word 2021—An Introduction

## Quiz Bee
### Page-35

1. FILE TAB     2. MINIMIZE

1.  a. (i)          b. (ii)                c. (ii)              d. (iv)
2.  a. type letters   b. document area   c. words          d. vertical
3.  a. T             b. F                   c. T                d. F
4.  a. Word Wrap    b. Cursor             c. Close button     d. File

5.  a. Title bar displays the name of the current document. It also displays window control buttons like Minimize, Maximize/Restore and Close buttons on the right corner.

    b. To print a document, follow the given steps:
      1 Click on the File tab.
      2 Select the Print option.
      3 Click on the Print button.

    c. Ribbon and Title bar.

6.  a. Mansi can find the Save option under the File tab.

    b. Document area.

# {CODING ZONE}

Enjoyment, Movement, Garment, Moment

# 4. Editing Text in Word 2021

## Quiz Bee
Page-43

1. select it          2. Delete

1.  a. (ii)          b. (i)             c. (iii)            d. (ii)          e. (ii)
2.  a. keyboard     b. mouse          c. undo, redo      d. original
3.  a. F             b. F               c. F                d. F

4.

| Undo Command | Redo Command |
|---|---|
| It is used to cancel the last command. | It is used to reverse the action of Undo command. |
| To apply Undo command, the keyboard shortcut is Ctrl+Z keys. | To apply the Redo command, the keyboard shortcut is Ctrl+Y keys. |

5.  a. Shift + Up Arrow

   b. Ctrl + A

   c. When you copy text, the selected text will remain at its original place as well as the place where it is to be pasted.

   d. Undo and Redo commands are present on the Quick Access Toolbar.

6.  a. Select a line below the cursor

   b. Select a character to the right of the cursor

   c. Select the entire document

   d. Select a line above the cursor

7.  a. Backspace key

   b. She should use copy and paste command.

## {C⊙DING Z⊙NΞ}

1. EGNARO        2. ANANAB

# PERIODIC ASSESSMENT 2

## (Based on chapters 3 & 4)

1.  a. Shift + right arrow          b. Shift + up arrow

   c. Shift + down arrow          d. Shift + left arrow          e. Ctrl + A

2.  a. Ctrl + N          b. Copy command          c. Redo command

   d. Quick Access Toolbar          e. Ctrl + S          f. Status bar

3.  ① Click on the File tab.

   ② Select the Print option.

   ③ Click on the Print button.

4. Shruti should choose Undo option from the Quick Access Toolbar to cancel the command given by her in Word.

# TEST SHEET 1

## (Based on chapters 1 to 4)

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

   f. (iii)        g. (iv)

2. a. Three        b. Hardware        c. Control unit        d. Booting

   e. Icons        f. Open        g. Vertical

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

   f. T        g. F        h. F

4. a. Hardware are the tangible parts of a computer system that we can see and touch.

   b. PowerPoint is used for creating a presentation.

   c. Desktop is the main screen of the Windows 11 operating system.

   d. Any two features of Windows 11 are:

   • It is a user-friendly operating system.

   • It has a GUI which means you do not need to remember all the commands.

   e. Save, Undo and Redo are the names of three commands present on the Quick Access Toolbar.

5. a. The devices that display the results of processing done by the CPU are called output devices. The most commonly used output devices are printer and  monitor.

   b. The steps to change the desktop background are:

   ① Right-click on the desktop and choose Personalize option.

   ② Click on the Background option.

   ③ Select any picture. After choosing a picture, the background will change automatically.

   c. The taskbar is a long horizontal bar located at the bottom of the desktop. It helps to manage various currently active programs, opened in different windows.

   The steps to pin an application to the taskbar are:

   ① Click on the Start menu.

   ② Right-click on the application and select More.

   ③ Select the Pin to taskbar option. The selected application will be pinned to taskbar.

   d. The steps to save a document in Word 2021 are:

   ① Click on the File tab.

   ② Select the Save or Save As option.

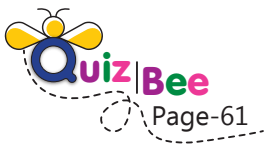   ③ Select This PC option and then, click on Browse option.

④ Select the location of the file.

⑤ Type the desired name for your file in the File name box.

⑥ Click on Save button. The file will be saved.

e. The steps to insert text in an existing document are:

① Place the pointer at the required position where you want to insert the text and click. An Insertion Point (cursor) appears on the screen to indicate the position where the inserted text will appear.

② The user can now type the new text.

# 5. Pivot Animator

**Quiz Bee** Page-61

1. Background        2. Origin Handle

## ASSESS YOURSELF

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

2. a. Add Frame     b. Player Controls  c. Segment Handle     d. Status Bar

3. a. Canvas        b. Figure          c. Origin Handle

4. a. Pivot Animator is a free and simple tool to make animations with stick figures.

   b. Saving an animation project means storing your animation on your computer. Saved projects can be opened later or shared with others.

   c. Exporting an animation means turning your project into a finished file, like a GIF or video.

5. a. Loop option       b. Segment Handle

## {CODING ZONE}

(iii)

# 6. Internet—An Introduction

1. Modem
2. Internet Service Providers

## ASSESS YOURSELF

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

2. a. Microsoft Edge     b. Internet Service Provider     c. URL

   d. Web Browser

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

4. a. Google

   b. Microsoft Edge

   c. Modulator-demodulator

5. a. E-mail is an online communication system. E-mail enables us to send and receive messages to people anywhere around the world within a matter of seconds.

   b.

   | Web page | Website |
   |---|---|
   | It is a digital document on the Internet. | It is a collection of related web pages that provide information. |

   c. The internet is a vast network of computers connected together, which makes communication between them possible. The term 'Internet' is derived from the word internetworking. It connects millions of computers across the world by means of cables, telephone wires or certain wireless media of communication.

   d. Four uses of Internet are:
   - E-mail
   - E-learning
   - E-shopping
   - Playing games

6. a. Web browser

   b. Address bar

a. ( 5 ) **+** ( 5 ) **=** ( 10 )   b. ( 6 ) **+** ( 4 ) **=** ( 10 )

c. ( 7 ) **+** ( 3 ) **=** ( 10 )   d. ( 9 ) **+** ( 1 ) **=** ( 10 )

# 7. Stepwise Thinking

## Quiz Bee
Page-79

| | | |
|---|---|---|
| 4 | 2 | 6 |
| 1 | 3 | 5 |

## ASSESS YOURSELF

1. a. (ii)    b. (ii)    c. (iii)

2. a. Problem Solving    b. Analyse    c. Programming    d. Organised

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

4. a. The main steps to perform any activity are:

   **1** Analyse the task.

   **2** Break up the task into small and simple steps.

   **3** Follow the sequence of steps to find the possible solution.

   b. Reasoning is the process of thinking about a task in a logical or sensible way. It helps you to choose a correct option from the available options.

   c. Example: Washing Clothes

Steps in the Activity:

**1** Collect dirty clothes

**2** Add detergent to the washing machine

**3** Load clothes into the machine

**4** Start the machine

**5** Dry the clothes after washing

How the Order Can Change:

• You can add detergent before or after loading the clothes.

• You might collect clothes before or after getting the machine ready.

As long as all steps are completed, the order of some steps can be changed without affecting the outcome.

5. a.

| 4 | Close sandwich with another slice of bread |

| 3 | Add desired fillings |

| 5 | Enjoy your sandwich |

| 2 | Put souce or spreads on the bread |

| 1 | Get bread and ingredients |



b. Steps to Tie Shoelaces (Bunny Ear Method):

**1** Take one lace in each hand.

**2** Cross the laces over each other to make an 'X'.

**3** Tuck one lace under the other and pull tight to make the first knot.

**4** Make a loop (bunny ear) with each lace.

**5** Cross the two loops over each other (like another 'X').

**6** Tuck one loop under the other and pull through.

**7** Pull both loops tight to secure the bow.
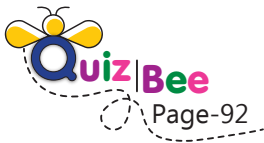
Do it yourself.

# PERIODIC ASSESSMENT 3

### (Based on chapters 5 to 7)

1. a. Pivot Animator is a free and simple tool to make animations with stick figures.

   b. Origin handle acts as the pivot point for rotating the figure.

2. a. Internet          b. Websites          c. E-mail          d. URL

   e. URL

3. Rahul will follow the stepwise thinking method to prepare a sandwich. The steps are:

   **1** Analysing the task: Here, the task is to prepare a sandwich.

   **2** Breaking the task into small or simple steps:

   　　a. Arrange the bread.

   　　b. Arrange the butter.

   　　c. Arrange the vegetables to be stuffed.

   　　d. Decide a sequence of steps to be followed.

   **3** Plan a sandwich:

   　　a. Take a slice of bread.

   　　b. Spread butter on one side of the bread.

   　　c. Put vegetables on the bread.

   　　d. Take another slice of bread.

   　　e. Spread butter on it and put it on the 1st slice of bread.

   　　f. Take a sandwich maker.

   　　g. Put the sandwich in the machine and ON the main power switch.

   　　h. After the green light is ON, off the sandwich maker.

   　　i. Take the sandwich on a plate and enjoy it.

# 8. Introduction to Scratch Programming

**Quiz Bee** Page-92

1. Orange cat      2. Motion

## ASSESS YOURSELF

1. a. (i)      b. (iii)      c. (iii)      d. (i)
2. a. block-based      b. When      c. Coding area      d. Costumes
3. a. (iii)      b. (ii)      c. (iv)      d. (v)      e. (i)
4. a. We can create animations, quizzes and stories.

   b. Two components of the Scratch window are:

   **Script:** It is defined as one or a set of blocks that begins with a hat block.

   **Stage Area:** It is a place where you will see all the action happening.

   c. To add a sprite, follow the given steps:

        ① Click on the Choose a Sprite button.

        ② Click on a sprite to add it to your project.

   d. To change the backdrop, follow the given steps:

        ① Click on the Choose a Backdrop button.

        ② Select a backdrop you want to use.

5. a.    [2]   Click on the Open button.    [1]   Click on the File menu.

        [3]   Select the Load from your computer.
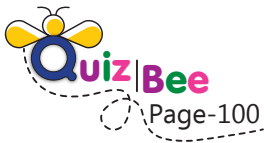
   b. Green flag

## {CODING ZONE}

A is in the first place.

# 9. Introduction to Robotics

The Mechanical parts or Actuators of a robot help it move.

## ASSESS YOURSELF

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

2. a. robotics     b. Sensors     c. accurate     d. decisions

3. a. The following are the characteristics of robots:

   • **Consistency:** Robots can work tirelessly.

   • **Speed:** They work at the same speed from beginning to end without taking any breaks.

   • **Safety:** They are used in places and areas considered dangerous for humans.

   • **Accomplishment:** Humans tend to make mistakes but robots are less likely to make errors.

   b. The branch of science and technology behind the design, construction, operation, application and manufacturing of robots is called robotics.

   c.

| Sensor | Controller |
|---|---|
| (i) The sensor acts like the robot's eyes. | (i) The controller is a built-in computer and acts like a brain. |
| (ii) It tells the robots about their surroundings. | (ii) It controls the functions of a robot. |

   d. (i) Goalkeeper     (ii) Nao     (iii) Mobile Robot

   e. AI or Artificial Intelligence is a type of technology that makes robots or machines act, learn and think like humans.

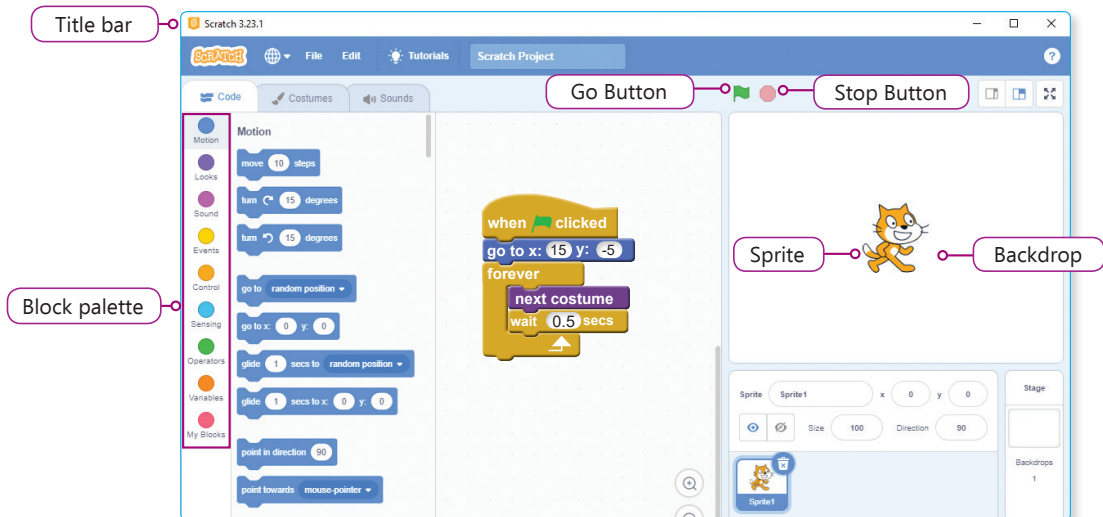4. a. Mechanical parts (actuators)

   b. MARCBOT

## {CODING ZONE}

20, 60, 30

# Periodic Assessment 4

(Based on Chapters 8 & 9)

1.



2. a. MARCBOT: It is used to inspect suspicious objects.

   b. Mobile Robot: It perform the task of sanitation in public areas.

   c. Ruby: It is used to serve in cafes, restaurants, etc. The Yellow House in Jaipur being the first to be served by it.

# Test Sheet 2

(Based on chapters 5 to 9)

1. a. (i)          b. (ii)          c. (ii)          d. (i)          e. (i)
   f. (i)          g. (i)

2. a. Ruby          b. Add Frame          c. Sensors          d. organised
   e. main steps          f. think          g. less          h. block-based
   i. character          j. Stop

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

4. a. Saving an animation project means storing your animation on your computer.

   b. A robot is an automatic, programmable machine that follows commands and does work that reduces human effort.

   c. Motion blocks are used to control the movement of a Sprite.

d. Script, Block palette and Backdrop.

e. Microsoft Edge.

5.  a. Saving an animation project means storing your animation on your computer.

b. Two characteristics of a robot are:

- Consistency: Robots can work tirelessly.

- Speed: They work at the same speed from beginning to end without taking any breaks.

c. main steps to solve a problem are:

1. Analyse the task.

2. Break up the task into small and simple steps.

3. Follow the sequence of steps to find the possible solution.

d. To open an existing project, follow the given steps:

1. Click on the File menu.

2. Select the Load from your computer.

3. Select the file you want to open.

4. Click on the Open button.