Class 6

Answer Key

CodePilot (5.0)

1. PowerPoint Magic

LEARNING LOGS

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

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

C. 1. Eraser 2. Custom Range 3. Action Buttons
4. Delete 5. Animation Pane

D. 1. Animations are effects you can add to text, pictures, or objects in a slide.
2. Two printing options in PowerPoint are Print All Slides and Print Selection.
3. Transitions are effects that control how one slide changes to the next during a PowerPoint presentation.
4. The Animation Painter allows you to copy and apply animations from one object to another.
5. Exit animations dictate how objects leave the slide, making them disappear smoothly, while Motion Paths let objects move along a specific path, adding dynamic movement to the slide.

COMPETENCY-BASED QUESTIONS

1. Karthik should use the Apply To All option to apply the same transition to all slides.
2. Aishwarya can use the Animation Pane to reorder animations in PowerPoint.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

2. Explore Excel

LEARNING LOGS

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

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

C. 1. File 2. Select All 3. Merge Cells 4. Double-click
5. Formatting text

D. 1. The Undo button used to reverse the last action or series of actions, While the Redo button re-applies the last undone action.

2. The Four options used for formatting text in a worksheet are:
   (i) Font Styles (ii) Font size (iii) Bold(B) (iv) Italic(I)

3. A custom list allows you to define your own series of data that can be used to automatically fill cells.

4. To rename a worksheet, follow the given steps:
   1 Right-click on the worksheet tab you want to rename.
   2 Select the Rename option.
   3 Type the new name for the worksheet and press the Enter key.

5. To select multiple cells that are not adjacent, click on the first cell. Then, hold the Ctrl key and click on the other cells you want to include. The selected cells will be highlighted.

COMPETENCY-BASED QUESTIONS

1. Jahnvi should rename the worksheets with meaningful names to easily identify the data in each sheet.
2. To separate first names (like Anupam) from full names (like Anupam Ghosh), you should use the Flash Fill feature in Excel.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

Periodic Assessment-1

(Based on chapters 1 & 2)

A. 1. Entrance
2. Emphasis
3. Exit
4. Motion Paths

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

3. Digital Citizenship

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

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

C. 1. Citizenship 2. Digital footprint 3. Privacy 4. Regular breaks
5. Screen-free

D. 1. Digital citizenship is the responsible, ethical and safe use of technology.
2. Right to freedom of expression you can express your thoughts online, as long as it does not harm others or break the law.
3. A digital footprint is the record of everything you do online, such as the websites you visit, videos you watch, photos you upload, games you play, and posts you share.
4. Tracking screen time helps health, sleep, learning, time management, mental health and relationships.
5. The digital world offers countless opportunities: learning new skills, solving problems, attending online classes or staying connected with family.

COMPETENCY-BASED QUESTIONS

1. Raghavan can set time limits for playing games, take regular breaks, and make sure to balance his screen time with offline activities like reading or outdoor play.
2. Vaidehi can adjust her privacy settings, avoid sharing personal details like her address or phone number, and be cautious about the content she posts.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

4. Getting Creative with Canva

A. 1. (iii) 2. (iii) 3. (iii) 4. (i) 5. (ii)

B. 1. Object Panel 2. Uploads 3. Canva Editor
4. Canva 5. Tools

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

D. 1. A template is a pre-designed layout that simplifies designing by letting you customise it to create your own design.

2. Canva is a popular online graphic design platform that allows users to create a wide range of visual content, including presentations, posters, social media graphics, documents and more.

3. The two key features of Canva are:
   - Canva is easy to use, allowing beginners to create graphics, presentations, and more.
   - Canva offers a free version for students and a paid version with additional tools and features.

4. The use of any two components present on the home page of Canva are:
   - Create: Lets you start a new design or use a template.
   - Templates: Offers thousands of templates for various design types on the left panel.

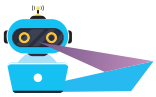
5. Header contains tools for managing your design (e.g., File, Resize, Undo, Redo, Save, Share), while Footer provides options like zoom, grid view, full-screen mode and page navigation.

COMPETENCY-BASED QUESTIONS

1. Fahim can use the Elements tab to find icons and images related to cyber safety, such as shields, computers, and locks.
2. Priyanshi can use the Footer section to add page numbers, date, and contact details across all pages.

LAB LEARNING

Do it yourself.



CODE CHECK

Do it yourself.

5. Algorithms, Flowcharts & System Maps

A. 1. (i) 2. (iii) 3. (ii) 4. (ii) 5. (ii)

B. 1. Process 2. Flowchart 3. Flow Line / Arrow 4. Cause-and-Effect
5. Debugging

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

D. 1. An algorithm is a set of step-by-step instructions or rules designed to perform a specific task or solve a problem.

2. A system map is a visual tool that shows how different parts of a system are connected and affect each other.

3. A flowchart is a diagram that uses shapes and arrows to show steps in an algorithm. It displays the steps in order and helps us understand and check instructions quickly.

4. Two components of system map are:
   - Elements: Parts or variables in the system (e.g., CPU speed, software efficiency).
   - Feedback Loops: Outputs loop back as inputs.

5. Debugging is the process of finding and fixing errors in a program.
   The skills necessary for debugging are:
   - logical thinking, problem solving, attention to detail, and careful step-by-step planning.

COMPETENCY-BASED QUESTIONS

1. Karthik will need to use logical thinking and step-by-step planning to debug the programme and put the calculation steps in the correct order.
2. The company can use a system map. This will show the relationships between stock levels and the sales rate and help identify areas for improvement.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

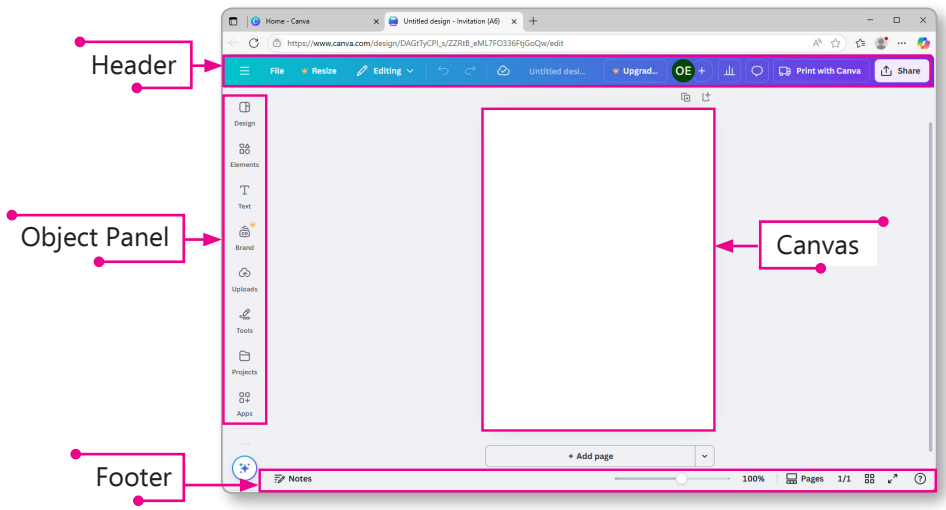
Periodic Assessment-2

(Based on chapters 3 to 5)

A. 1. Mindful Sharing

2. Ensuring Cybersecurity

B.



C. 1. Terminal (Start/ Stop)

2. Process

3. Input/ Output

4. Decision

5. One-page Connector

6. Flow Line/ Arrow

Test Sheet-1

(Based on chapters 1 to 5)

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

B. 1. T 2. F 3. F 4. F
5. T 6. F 7. F 8. F

C. 1. Eraser 2. Custom range 3. Formatting text 4. Digital footprint
5. Object panel 6. Upload 7. Flowchart 8. Flow line / arrow

D. 1. Two printing options in PowerPoint are Print All Slides and Print Selection.

2. Transitions are effects that control how one slide changes to the next during a PowerPoint presentation.

3. A custom list allows you to define your own series of data that can be used to automatically fill cells.

4. Digital citizenship is the responsible, ethical, and safe use of technology.

5. Right to freedom of expression you can express your thoughts online, as long as it does not harm others or break the law.

6. The use of any two components present on the home page of Canva are:
   - Create: Lets you start a new design or use a template.
   - Templates: Offers thousands of templates for various design types on the left panel.

7. A flowchart is a diagram that uses shapes and arrows to show steps in an algorithm. It displays the steps in order and helps us understand and check instructions quickly.

8. Two components of system map are:
   - Elements: Parts or variables in the system (e.g., CPU speed, software efficiency).
   - Feedback Loops: Outputs loop back as inputs.

6. Touch to Motion with MIT

A. 1. (iii) 2. (iii) 3. (iii) 4. (ii) 5. (i)

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

C. 1. Blocks 2. Gyroscope 3. Ball 4. Data 5. Brightness

D. 1. MIT App Inventor is a free online tool that lets you create your own mobile apps for Android devices. Instead of writing long codes, you use colourful blocks that fit together like a puzzle.

2. The Canvas is like a blank paper in your app where you can draw with fingers or code and detect touch events like tap, drag and swipe for interactive visuals.
3. Two sensors are:
   - Pedometer Sensor: It counts the steps you take while walking or running.
   - Magnetic Field Sensor: It detects magnetic fields around the device.
4. Touch Down: This event happens when the user first touches the screen or an element, starting an action like drawing or detecting the touch.

   Touch Up: This event occurs when the user lifts their finger, ending or stopping the action.
5. Use of buttons and labels are:
   - Buttons change something on the Canvas, like colour or position, when clicked.
   - Labels display messages based on Canvas events, like a touch in a specific area.

COMPETENCY-BASED QUESTIONS

1. Nikumb should use the ImageSprite component in MIT App Inventor to make pictures move across the screen.
2. Aarav should add the Ball component to the Canvas in MIT App Inventor to create a bouncing ball game.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

7. HTML5–Getting Started

LEARNING LOGS

A. 1. (iii) 2. (ii) 3. (iii) 4. (iii) 5. (ii)

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

C. 1. Website 2. Notepad 3. Container tags 4. Angle 5. <BODY>

D. 1. A web page is a single page on the Internet with text, images, videos, or links. While website is a collection of linked web pages under one address, written in HTML.

2. The <HEAD> tag contains metadata about the web page. It includes tags that provide information about the web page but are not displayed directly on the page itself.
3. Nesting tags means placing one HTML tag inside another. Tags follow LIFO (Last In First Out): the last opened tag must be closed first.

   For example:

   <BODY> <H1> Web Browser </H1> </BODY>
4. Container tags have opening and closing tags that enclose data. The closing tag has a forward slash, while an empty tag is a tag that does not have a closing tag. It is used by itself to add something to a web page.
5. HTML comments add explanations in code and are not shown on the web page. They start with <!-- and end with -->.

COMPETENCY-BASED QUESTIONS

1. Revati should use the HTML comment feature. Comments allow you to write notes or messages inside the HTML code that are not displayed on the web page.
2. Anirban should use the
 (line break) tag. This tag moves the text to the next line without creating a new paragraph.

LAB LEARNING

Do it yourself.

CODE CHECK

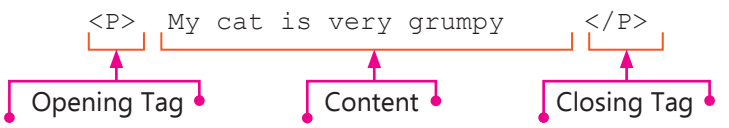
Do it yourself.

Periodic Assessment-3

(Based on chapters 6 & 7)

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

B. 1.



2.
```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE>Title of the web page</TITLE>
</HEAD>
```
Head Section

```
<BODY>
Content of the Web page
</BODY>
</HTML>
```

Body Section

C.
1. HyperText Markup Language
2. What You See Is What You Get
3. Last In First Out
4. Subscript
5. Superscript

D. 1. Button 2. Label 3. Textbox

8. CSS3–Styling Basics

LEARNING LOGS

A. 1. (i) 2. (iii) 3. (ii) 4. (iii) 5. (i)

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

C. 1. Declaration 2. <STYLE> , <HEAD> 3. #FFFFFF
4. BORDER-STYLE 5. Property

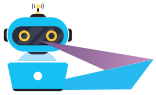
D.
1. The same style can be reused across pages, simplifying updates and management.
2. In CSS, a declaration block is a set of one or more declarations enclosed in curly braces {}.
3. There are three main ways to add CSS to your web page:
   Inline CSS , Internal CSS , External CSS
4. This property sets the width of an element's border and is used to control its thickness for styling and emphasis.
5. In CSS, margin properties are used to create space around elements, outside of their borders.

COMPETENCY-BASED QUESTIONS

1. The issue with Samantha's CSS code is that italicize is not a valid value for the font-style property. The correct value to italicize text is italic.
2. Shaan should use the margin property.The margin property adds space around an element, outside its border.

LAB LEARNING

Do it yourself.



CODE CHECK

Do it yourself.

9. Python–Start to Code

A. 1. (ii) 2. (ii) 3. (iii) 4. (i) 5. (i)

B. 1. % 2. Identifier 3. float 4. Data type 5. print ()

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

D. 1. Keywords are reserved words with special meanings in Python, used for tasks like control flow (if, for, while), functions (def), and classes (class).

2. A character set is the collection of characters a programming language recognises.

3. A compiler translates the entire source code into machine language at once and shows all errors after compilation, while an interpreter translates and runs code line by line, showing errors one at a time, unlike a compiler.

4. The two features of Python are:
   - Python's simple, English-like syntax makes it easy for beginners to learn and understand programming concepts.
   - Python is freely available to download and use without any license fees.

5. In Python, the order of operations is determined by operator precedence and associativity rules, which follow the standard PEMDAS/BODMAS order.

COMPETENCY-BASED QUESTIONS

1. Debisha should convert the input value to an integer using the int() function.By default, the input() function returns data as a string.

2. To square the radius, Sanya should use the exponentiation operator (**), which raises a number to a specific power.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

10. Tinkercad–Shape Your Ideas

LEARNING LOGS

A.

1. (i)	2. (iii)	3. (iii)	4. (ii)	5. (iv)

B.

1. 2D	2. Design	3. Notes Tool	4. F	5. Copying

C.

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

D. 1. Two features of Tinkercad are:

- User-Friendly Interface: Easy for beginners with drag-and-drop 3D model creation.
- 3D Modelling and Printing: Create 3D models and export them for printing.

2. Tinkercad is an easy-to-use and simple 3D design and modelling software. It runs on a web browser.

3. To align shapes in Tinkercad are:

1. Click on the shape to select it.
2. Hold down the Shift key and click on the additional shapes to select them.
3. Click on the Align button in the top toolbar.
4. Hover and click your mouse over one of the black alignment handles.

4. The three components of Tinkercad 3D design window are:

- Tinkercad dashboard: This Tinkercad logo takes you back to the dashboard.
- Recent designs: You can click this button to view the list of designs you have recently opened.
- Project Name: It displays the title of the current project. Tinkercad assigns a random name to your project, but you can rename it.

5. To share your design with others, follow the given steps:

1. Click on the Send to button on the top toolbar.
2. Click on the Invite people button.
3. Click on the Copy link button.

COMPETENCY-BASED QUESTIONS

1. Ravi should use the Middle mouse button or Shift + Right mouse button to pan the view horizontally or vertically without rotating the scene.
2. Nitin should use the Hole feature in Tinkercad to subtract one shape from another and create a hole.

LAB LEARNING

Do it yourself.

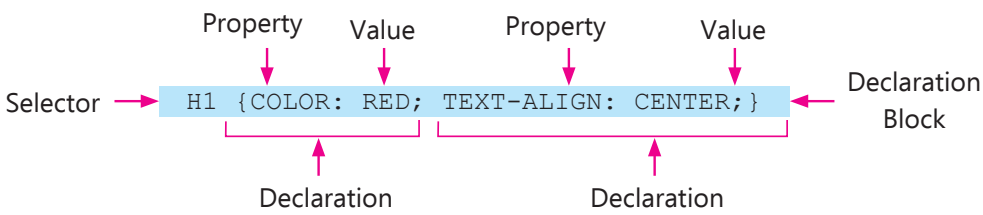
CODE CHECK

Do it yourself.

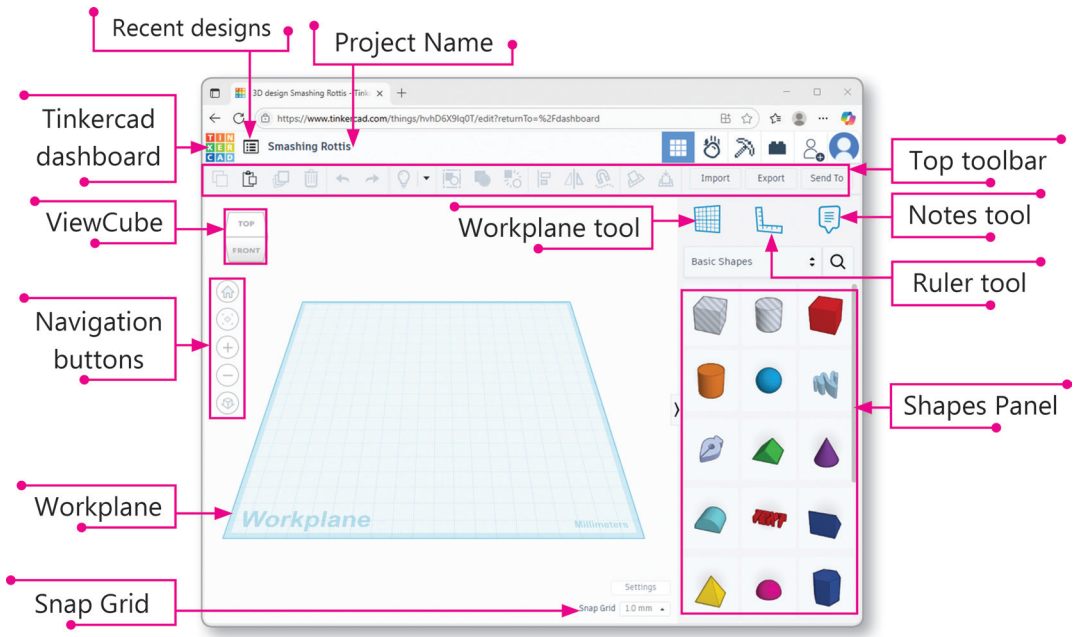
Periodic Assessment-4

(Based on chapters 8 to 10)

A.



B.



C.

Operator	Name
()	Parentheses
**	Exponentiation
*, /, //, %	Multiplication, Division, Floor Division, Modulus
+, –	Addition, Subtraction
<, <=, >, >=, !=, ==	Relational operators
not	Logical operators
and	
or	
=, %=, /=, //=, -=, +=, *=, **=	Assignment operators

Test Sheet-2

(Based on chapters 6 to 10)

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

B. 1. F 2. T 3. F 4. T 5. T 6. T
7. T 8. T

C. 1. Gyroscope 2. Ball 3. Container tag 4. Angle
5. #FFFFFF 6. Identifier 7. 2D 8. Design

D.

1. MIT App Inventor is a free online tool that lets you create your own mobile apps for Android devices. Instead of writing long codes, you use colourful blocks that fit together like a puzzle.
2. Container tags have opening and closing tags that enclose data. The closing tag has a forward slash. While an empty tag is a tag that does not have a closing tag. It is used by itself to add something to a web page.
3. HTML comments add explanations in code and are not shown on the web page. They start with <!-- and end with -->.
4. In CSS, a declaration block is a set of one or more declarations enclosed in curly braces {}.
5. There are three main ways to add CSS to your web page:

   Inline CSS , Internal CSS , External CSS
6. In Python, the order of operations is determined by operator precedence and associativity rules, which follow the standard PEMDAS/BODMAS order.
7. To align shapes in Tinkercad are:

   1 Click on the shape to select it.

   2 Hold down the Shift key and click on the additional shapes to select them.

3 Click on the Align button in the top toolbar.

4 Hover and click your mouse over one of the black alignment handles.

8. The three components of Tinkercad 3D design window are:

i. Tinkercad dashboard: This Tinkercad logo takes you back to the dashboard.

ii. Recent designs: You can click this button to view the list of designs you have recently opened.

iii. Project Name: It displays the title of the current project. Tinkercad assigns a random name to your project, but you can rename it.