1. Computer Memory

LEARNING LOGS

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

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

C. 1. USB 2. 8 3. RAM, ROM 4. Memory Card

5. Cloud

D. 1. Computer memory is a space where a computer stores information that it needs to remember both for a short and a long time.

2. Primary memory is also known as Internal memory. It is considered as the main memory which can be easily accessed by the computer. It stores the data and instructions the computer uses.

3. The differences between RAM and ROM are as follows:

RAM	ROM
It stands for Random Access Memory.	It stands for Read-only Memory.
It is a volatile memory.	It is a non-volatile memory.

4. The storage capacity of secondary storage devices are as follows:
   • External Hard Disk comes in various sizes like 256 GB, 512 GB, 1 TB and more.
   • Pen Drive comes in different sizes like 4 GB, 8 GB, 16 GB and more.

5. Cloud storage is a service that allows you to store your files on the Internet instead of on a physical device like mobile phone, computer, etc. Cloud storage allows you to access your files from any location using Internet. For example, Dropbox, iCloud, Google Drive, etc.

1. The game is using RAM (Random Access Memory).
2. She should use an External Hard Disk.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

2. Files and Folders in Windows 11

LEARNING LOGS

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

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

C. 1. Rename 2. Left pane 3. Period (.) 4. Folder 5. File Explorer

D. 1. A file is a collection of data or information stored on a computer or other digital device.

2. Temporary files are made by software and the operating system to hold data for a short time while tasks run.

3. The Control Panel in Windows is used to view and change system settings. It provides one place to manage hardware, software, security, network and other computer settings.

4. The steps to restore a deleted file are as follows:

   1 Double-click on the Recycle Bin icon on the Desktop.

   2 Right-click on the file in the Recycle Bin that needs to be restored.

   3 Select the Restore option.

5. Copying a file or folder creates a duplicate in a new location while keeping the original unchanged. Moving a file or folder transfers it to a new location and the original is no longer in the old place.

COMPETENCY-BASED QUESTIONS

1. Disk Cleanup / Delete Temporary Files tool
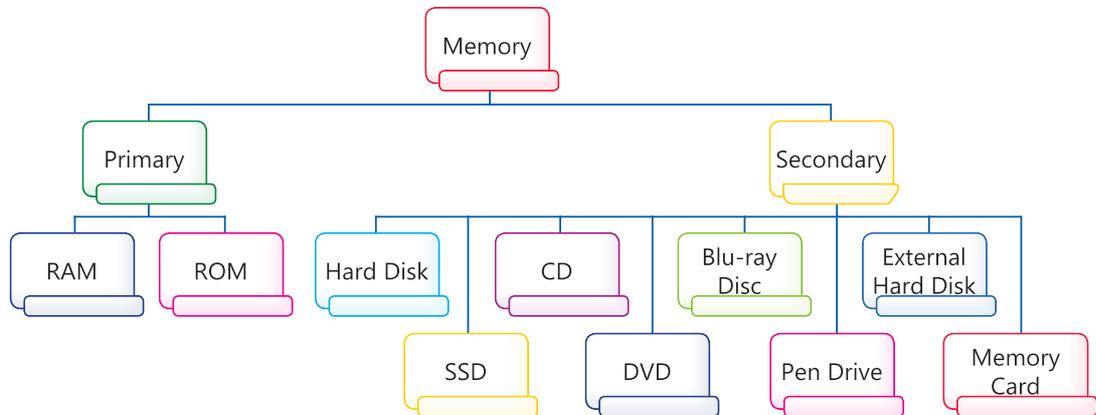2. Date and Time option in the Clock and Region setting of Control Panel.

Periodic Assessment-1

(Based on chapters 1 & 2)

A.

```
                          Memory
              ┌──────────────┴──────────────────────────┐
           Primary                                  Secondary
        ┌─────┴─────┐        ┌────────┬────────────┬────────────┬──────────────┐
       RAM        ROM    Hard Disk    CD       Blu-ray      External
                                                  Disc      Hard Disk
                              ┌───────────┬────────────┬──────────────┐
                             SSD         DVD        Pen Drive      Memory
                                                                    Card
```

B.

1. File	2	a.	Shows files and folders
2. File Explorer	5	b.	Change system settings
3. Primary Memory	4	c.	Permanent in nature
4. Secondary Memory	1	d.	Collection of data or information
5. Control Panel	3	e.	Internal memory

C.
1. Folder
2. Deleted
3. Documents
4. Operating System
5. File extension

3. Sketchpad Advanced Art Skills

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

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

C. 1. Sketchpad 2. Hidden 3. Pattern 4. Star 5. Layer

D. 1. Hamburger icon option are as follows:

   a. **Send to Back:** Moves the layer behind others.

   b. **Send to Front:** Moves the layer slightly in front of another.

   c. **Send Backwards:** Moves the layer all the way to the back.

2. Eyeball Icon is used to show or hide a layer.

3. The Mirror Brush is a digital tool used to make symmetrical designs.

4. Types of backgrounds are as follows:

   a. **Solid:** To keep the focus on the main elements of the drawing.

   b. **Linear:** A smooth transition from one colour to another.

5. Layers are like clear plastic sheets stacked on top of each other in a drawing. Each layer holds a different part of your artwork which help you keep your drawing neat and organised.

COMPETENCY-BASED QUESTIONS

1. The Mirror Brush tool.

2. Aditi can simply drag the layer up or down in the Layers Panel to reorder it correctly.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

4. Word Beyond the Basics

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

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

C. 1. Red   2. Direction   3. Through   4. WordArt   5. Ungrouping

D.
1. Text wrapping is one of the special features present in Word that allows the text to move around the picture or object.
2. Footer displays details at the bottom, such as page numbers and document version.
3. The Thesaurus feature enhances vocabulary by providing synonyms and antonyms for words.
4. SmartArt in Word allows you to create professional diagrams to visually present ideas such as processes, hierarchies, relationships, cycles and lists.
5. The steps to apply a style to an image are as follows:

   1 Select the image.

   2 Click on the Quick Styles option under the Picture Format tab.

   3 Choose the style you want to apply to your image.

COMPETENCY-BASED QUESTIONS

1. SmartArt feature of Word should be used.
2. Hemant should select the picture and go to Wrap Text options. He can choose Square, Tight or Through to make text appear around the picture. This will move the text from behind the picture and flow alongside it.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

Periodic Assessment-2

(Based on chapters 3 & 4)

A. 1. Resize   2. Rotate   3. WordArt

B. 1. Resizing   3   a. Visually present ideas

2. Rotating   4   b. Synonyms and antonyms

3. SmartArt   1   c. Adjusting width and height

4. Thesaurus   2   d. Turning the image

C. 1. Layers
2. Background
3. Rangoli
4. Clipart
5. Images

Test Sheet-1

(Based on chapters 1 to 4)

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

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

C. 1. Direction   2. Period (.)   3. RAM, ROM   4. Hidden
5. File Explorer   6. 8   7. Red   8. Folder

D. 1. Footer displays details at the bottom, such as page numbers and document version.

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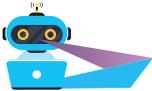# 5. PowerPoint Made Easy

LEARNING LOGS

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

B. 1. F　　2. T　　3. T　　4. F　　5. T

C. 1. Slide　　2. Title Bar　　3. Esc　　4. Notes　　5. Nine

D. 1. A presentation is a way to share ideas using slides that include text, images or videos.

2. Slide layout defines the arrangement of placeholders for text, images and other content on a slide.

3. The description of PowerPoint components is as follows:

   a. **Quick Access Toolbar:** Customisable icons for frequently used commands.

   b. **Title Bar:** Shows the file name.

4. To add a new slide, follow the given steps:

   1 Click on the Insert tab.
   2 Click on the New Slide drop-down arrow.
   3 Select the desired slide layout.

5. The text alignment options in PowerPoint are as follows:

   a. **Align Left:** Aligns the text to the left side of the slide.

   b. **Align Right:** Aligns the text to the right side of the slide.

   c. **Center:** Aligns the text in the middle of the slide.

   d. **Justify:** Aligns the text evenly on both sides.

1. Fahad can use the Zoom Slider (at the bottom-right corner of the PowerPoint window) or the Zoom option under the View tab to magnify or reduce the slide details.

2. Kamakshi can press the Esc key to exit the slideshow.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

6. Safe and Smart Web Use

LEARNING LOGS

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

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

C. 1. Web Browser 2. Online Safety 3. Forward

4. Refresh 5. Google Chrome

D. 1. Uses of web browser are as follows:

a. Read books and articles.

b. Connect with friends and family via social media or video conferencing.

2. Copilot is a AI tool that answers questions, helps write stories and creates pictures from descriptions.

3. Online safety is about protecting yourself and your personal information on the Internet. following online safety rules helps keep you safe while browsing, chatting or playing games.

4. Ways to stay safe from strangers online are:

a. Don't reply to messages from strangers.

b. If someone keeps trying to talk to you, block and report them on the website or app.

5. Cyberbullying occurs when someone is unkind or harmful to others online, through messages, posts or comments. To avoid it:

a. Don't respond to mean messages.

b. Inform a parent or teacher.

1. Mahesh should use extension.
2. Ameera should type the website URL or search term in the Address Bar to access the site.
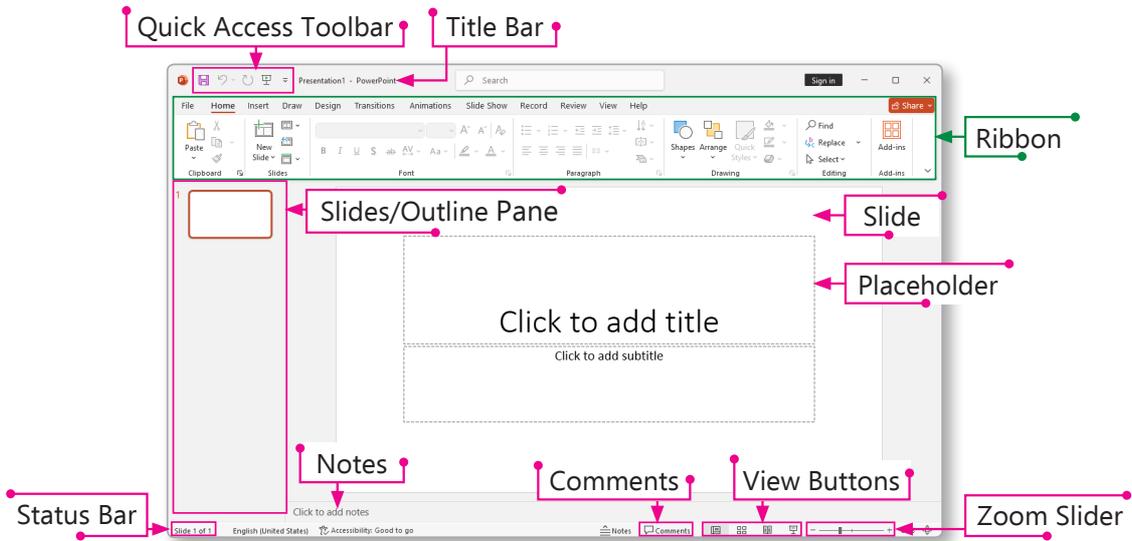
LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

Periodic Assessment-3
(Based on chapters 5 & 6)

A. 1. Google Chrome   2. Safari   3. Mozilla Firefox   4. Microsoft Edge

B. 1. Left Align   2. View buttons   3. Slides Pane   4. Center Align

C.

7. Vision to Decision

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

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

C.   1. Spot   2. Visual clues   3. Seeds   4. Coordinates

       5. Buildings

D.   1. Visual processing is how the brain understands and interprets what you see. When you look at something, your eyes send information to your brain.

       2. Infographic is a visual representation of information. It uses a combination of pictures, symbols and concise text.

       3. A green traffic light means go, a red means stop and a yellow means wait.

       4. Sudoku is a popular puzzle game where you fill a grid with numbers or images. The goal is to place a number or image in each cell so that it appears only once in every row and column.

       5. What repeats? How often does it repeat? Can I guess what comes next?

COMPETENCY-BASED QUESTIONS

1. Nagarjun should stop and wait because a red traffic light means stop.

2. Riya cannot place the number 5 in that box because Sudoku rules allow each number only once per row and column.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

8. Scratch Coding Adventures

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

B. 1. Vector   2. Erase All   3. Events   4. Hide   5. Coding

C.

1.		5	a. C-Block
2.		4	b. Reporter Block
3.		1	c. Hat Block
4.		2	d. Stack Block
5.		3	e. Boolean Block

D.

1. Sound blocks are as follows:

   a. play sound [Meow] until done – Plays the sound and waits until it finishes before continuing the script.

   b. start sound [Meow] – It is used to play the selected sound without pausing the script.

2. These blocks have notch at the top and bumped bottom. They stack on top of each other to tell the sprite what to do, like move, turn or say something.

3. Custom costumes are different appearances you can assign to a sprite using tools in the Costumes tab.

4. Comparison operator allow you to compare the relationship between two values or variables. It will compare two numbers and decide whether it is true or false. Comparison operators are used with the if... then block.

5. Difference between the 'if then' and 'if then else' blocks are as follows:

If then block	If then else block
Checks if a condition is true. If yes, it performs the action. If not, it does nothing.	Checks a condition and performs one action if it's true or a different action if it's false.

1. Vikram should use the division (/) operator block to divide the candies equally among 4 friends.

2. Jiya should use the "think [message] for [seconds]" block to show a thought bubble with a message.

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

9. Smart World with AI

LEARNING LOGS

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

B.   1. Smart cities   2. Energy   3. Drones

   4. Software   5. Google Assistant

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

D.   1. Autonomous transportation means self-driving vehicles that use AI, sensors and cameras to follow traffic rules, control speed and avoid obstacles without human help.

   2. A virtual assistant is a software that uses AI to perform tasks through voice or text. Examples include Siri, Alexa and Google Assistant.

   3. AI helps the military by improving operations. AI-powered drones are used for spying and targeting. Self-driving military vehicles, like tanks and trucks, can move without humans, making work safer and more efficient in dangerous areas.

4. Two uses of AI in daily life:

(i) AI makes homes smarter by controlling devices like lights, thermostats.

(ii) Google Maps use AI to give real-time traffic updates, suggest the fastest routes.

5. Two ways AI helps in healthcare:

(i) Analyses medical images like X-rays and MRIs to detect diseases such as cancer or fractures.

(ii Creates personalised treatment plans based on a patient's health history and genetics.

COMPETENCY-BASED QUESTIONS

1. Kimaya can use Google Maps, which uses AI to suggest faster alternative routes in real-time.

2. Priya is using a Smart Home device (AI-powered smart appliances like a smart thermostat).

LAB LEARNING

Do it yourself.

CODE CHECK

Do it yourself.

Periodic Assessment-4
(Based on chapters 7 to 9)

A.

B.

1. `and` — 3 — a. Events Block
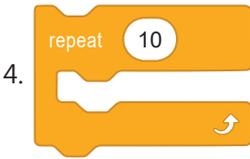
2. `touching color ?` — 4 — b. Control Block

3.   1   c. Operators Block

4.   2   d. Sensing Block

C. 1. Siri
2. Google Assistant
3. Alexa

Test Sheet-2
(Based on chapters 5 to 9)

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

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

    6. F   7. T   8. F

C. 1. Forward   2. Coding blocks   3. Title Bar   4. Visual clues

    5. Software   6. Energy   7. Vector   8. Esc

D. 1. Comparison operator allow you to compare the relationship between two values or variables. It will compare two numbers and decide whether it is true or false. Comparison operators are used with the if... then block.

2. Ways to stay safe from strangers online are:

a. Don't reply to messages from strangers.

b. If someone keeps trying to talk to you, block and report them on the website or app.

3. AI helps the military by improving operations. It uses AI-powered drones for spying and targeting and self-driving military vehicles make work safer and more efficient in dangerous areas.

4. A green traffic light means go, a red means stop and a yellow means wait.

5. To add a new slide, follow the given steps:

   1 Click on the Insert tab.

   2 Click on the New Slide drop-down arrow.

   3 Select the desired slide layout.

6. Visual processing is how the brain understands what you see. Your eyes send information and the brain identifies it — like seeing a dog and knowing it's a dog.

7. The description of PowerPoint components is as follows:

a. **Quick Access Toolbar:** Customisable icons for frequently used commands.

b. **Title Bar:** Shows the file name.

8. Cyberbullying occurs when someone is unkind or harmful to others online, through messages, posts or comments. To avoid it:

   a. Don't respond to mean messages.

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