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PMP Planet
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The Ultimate Resource

Be Future Ready
IT Planet
PRESENTS

Based on the suggested skills under
National
Education
Policy
2020
★

Code AI

Artificial Intelligence

Animated Life Skills

Coding

Computational Thinking

Experiential Learning

Multidisciplinary Approach

Subject Integration

Art Integration

Skill Formation

Linked with SDGs



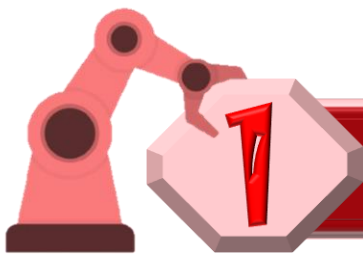
Windows 10
WITH OFFICE 2019

Also compatible with Office 2016

ANSWER KEY

Table of Contents

Chapter – 1 Computer and its Components.....	2
Chapter – 2 Windows Operating System.....	4
Chapter – 3 Paint 3D.....	6
Chapter – 4 Word Processor (MS Word).....	7
Chapter – 5 Internet.....	9
Chapter – 6 Step-wise Thinking.....	11
Chapter – 7 Scratch 3.....	14
Chapter – 8 AI vs. Human Intelligence.....	16
WORKSHEET – I	18
WORKSHEET – II	20



EXERCISES:

A. Tick [☑] the correct answer.

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

B. Write 'T' for True and 'F' for False statements.

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

C. Fill in the blanks.

1. processes 2. Versatility 3. Operating system 4. Linux
5. Excel

D. Differentiate between the following.

1. **Input Device:** A hardware components that allow you to enter data and instructions into a computer are called Input Devices.

Output Devices: A hardware components that show the final result are called Output Devices.

2. **Hardware:** All the physical equipment that are attached to a computer are collectively called hardware.

Software: It is a set of instructions that tells the computer hardware what to do and how to perform a particular task.

E. Answer the following questions.

1. A computer is also called a computer system as it is not a single machine, but a combination of hardware and software components that work together to perform a task.
2. Four characteristics of a computer are: - Speed, storage, versatility and accuracy.
3. System Software is a type of software that controls and manages the overall activities of a computer system.

F. Application-based Question

IPO (Input — Process — Output)



ACTIVITY REARRANGE:

Rearrange the jumbled-up letters and write the correct word/words at the given space.

- a. R W H D A R A E HARDWARE
- b. W F T E A O S R SOFTWARE
- c. Y T M E S S N T I U SYSTEM UNIT

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Windows Operating System



EXERCISES:

A. Tick [☑] the correct option.

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

B. Write 'T' for True and 'F' for False statements.

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

C. Fill in the blanks.

1. Operating System 2. Desktop 3. Restarting 4. Tile

D. Differentiate between the following.

CLI: Using a Command Line Interface (CLI), the user interacts with the operating system by typing commands with the keyboard to perform specific tasks.

GUI: With a Graphical User Interface (GUI), the user interacts with the operating system by using keyboard and mouse to access windows, icons, and menus.

E. Answer the following questions.

1. Interface provides simpler ways for the users to use the computer. User interacts with operating system through its user interface.
2. Start menu is divided vertically in two parts. The left part shows all the installed Apps along with Power, Settings, File Explorer and User's icon. The right part features a selection of tiles or live tiles.
3. This box is used to search for items on your computer or on the Internet.
4. Three methods to start an app in windows 10 are :-
 - a. Using the start menu tiles
 - b. Using all app list
 - c. Using Search Box

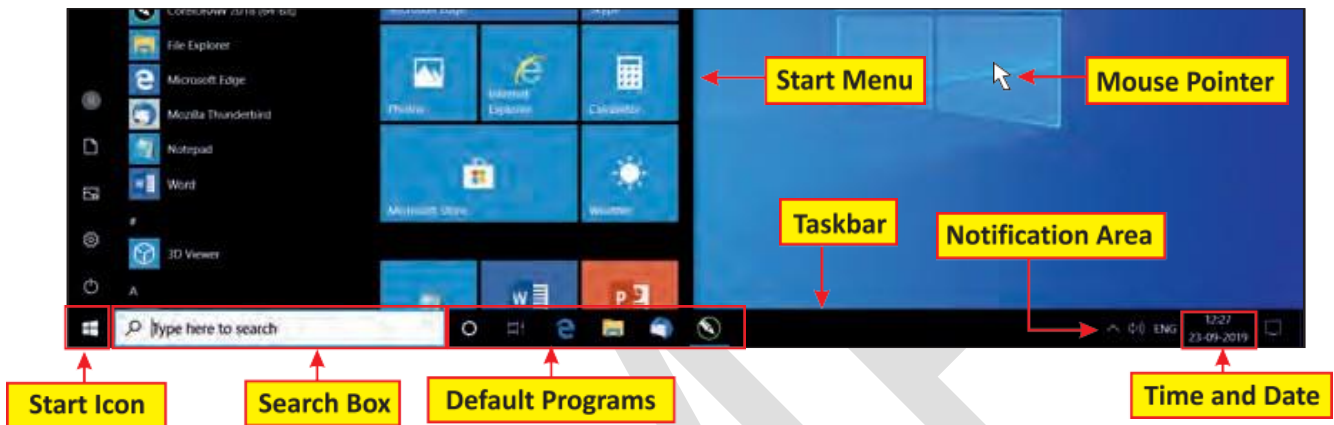
F. Application-based Question.

Search Box



ACTIVITY LABEL:

Label the given screen correctly.





ACTIVITY MARK:

Find out and mark different components of Windows 10 screen.

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



EXERCISES:

A. Tick [☑] the correct answer.

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

B. Write 'T' for True and 'F' for False statements.

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

C. Fill in the blanks.

1. Microsoft 2. height, width, length 3.Text 4. texture, icons
5. Canvas

D. Differentiate between the following.

2D shape: A 2D shape is flat and comprises of two dimensions that are length and width. These shapes are also known as flat shapes.

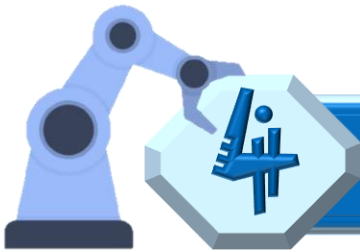
3D shape: A 3D shape comprises of three dimensions that are length, width and height. These shapes look solid and real.

E. Answer the following questions.

1. Paint 3D is used to create, edit and print 3D shapes. It allows you to make creative projects using 2D and 3D tools.
2. Rotation tools (x-axis, y-axis and z-axis) appear around the object. You can use these tools to see the 3D effect.
3. Paint 3D stickers come in the form of shapes like lines, curves, squares, and stars; traditional stickers like cloud, spiral, rainbow, and facial features; and surface textures.
4. You can add 3D objects in your project from 3D library.

F. Application-based Question.

Paint 3D



Word Processor (MS Word 2016)



EXERCISES:

A. Tick [☑] the correct answer.

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

B. Write 'T' for True and 'F' for False statements.

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

C. Write the shortcut keys for the following.

1. Ctrl + S 2. Ctrl + B 3. Ctrl + I 4. Ctrl + A

D. Fill in the blanks.

1. Google Docs 2. Status 3. Font 4. Left
5. .docx

E. Answer the following questions.

1. A word processor is a computer software that is used for creating and formatting a document.
2. Formatting means making any changes to the text of the document so that it should look eye-catching and attractive.
3. Increasing the size makes reading of the text easier while decreasing the size helps fit more text on a page.
4. The document must be saved into the memory of computer for its future use. Once the document is saved, you can review and edit it later.

F. Application-based Question.

Click on font option to do the task.



ACTIVITY PUZZLE TIME:

Solve the crossword puzzle with the help of given clues.

2↓ 3↓

	G				W														
1→	W	O	R	D	P	R	O	C	E	S	S	O	R						
	O					I													5↓
	G					4→	T	I	T	L	E	B	A	R					
	L						E												I
	E						R												B
	D																		B
7→	W	O	R	K	A	R	E	A											O
	C																		N
6→	S	C	R	O	L	L	B	A	R										



Internet

CYBER ZONE



EXERCISES:

A. Tick [] the correct answer.

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

B. Write 'T' for True and 'F' for False statements.

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

C. Fill in the blanks.

1. E-mail 2. Social Networking 3. Website 4. URL
5. Web browser

D. Give the full form of the following.

1. Electronic Mail 2. World Wide Web 3. Uniform Resource Locator

E. Define the following.

1. **Homepage:** Whenever we open a web browser, the first page that appears is the home page. It always displays the starting web page of a website.
2. **Link:** A link, also called hyperlink, is a built-in connection to another related web page or the part of a web page.

F. Answer the following questions.

1. The Internet is popularly called Net. It is the largest network that connects millions of computers across the world.
2. Four uses of Internet are:
Emailing, information searching, shopping and chatting.
3. Search engine is the software that finds websites, web pages, images, videos, news, maps, and other information related to a specific topic on the Internet.

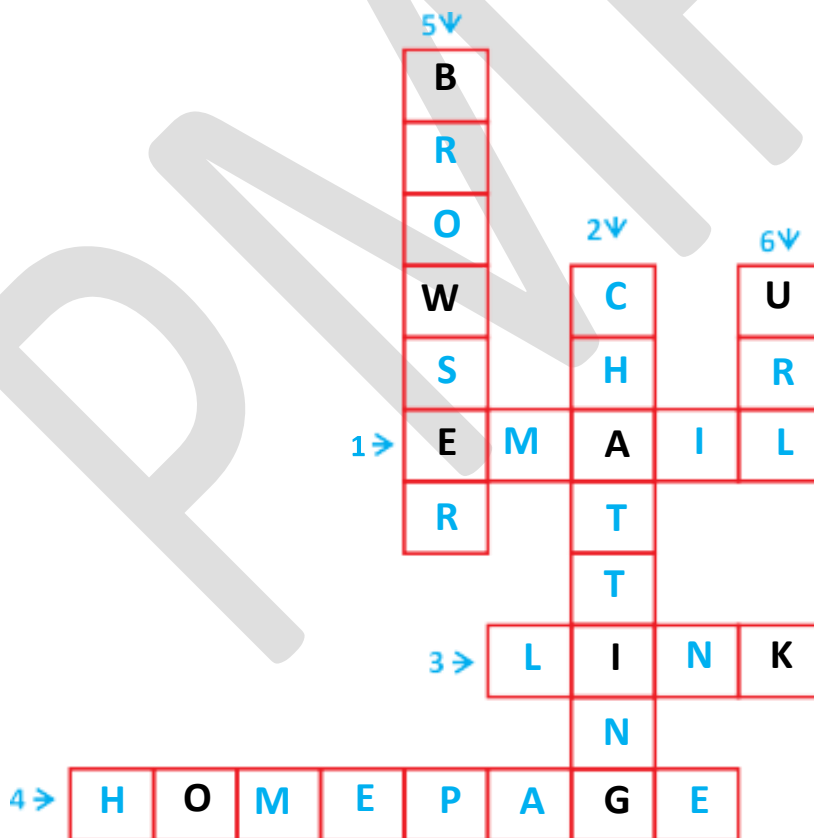
G. Application-based Question.

E-shopping



ACTIVITY CROSSWORD:

Solve the crossword with the help of given icons.





ACTIVITY CIRCLE AND WRITE:

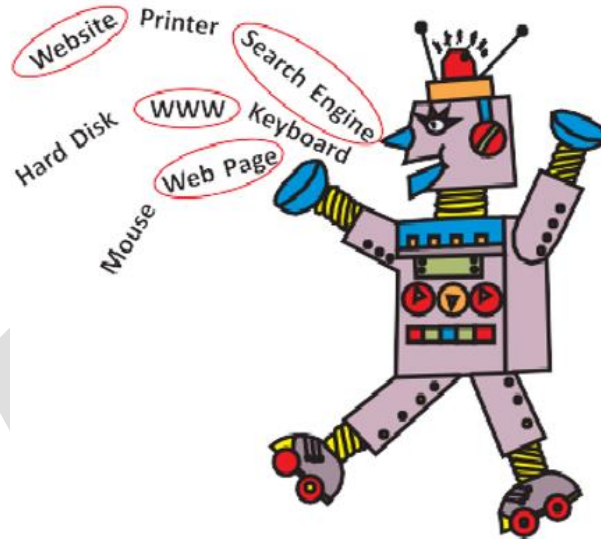
The robot is speaking some words. Circle the Internet-related words and write them in the space given below.

Website

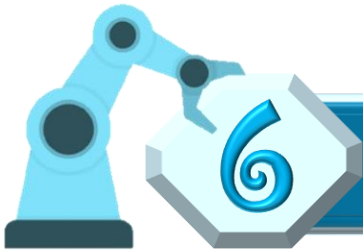
WWW

Search Engine

Web Page



PM



Step-wise Thinking

COMPUTATIONAL THINKING

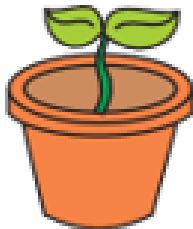


ACTIVITY SEQUENCE:

GROWING A PLANT

Write the number of steps in the correct sequence.

5



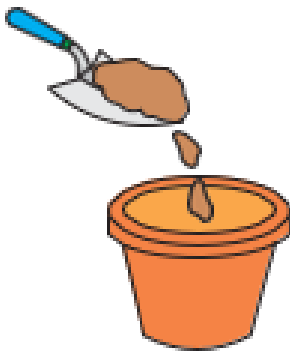
Tiny sprouts are formed.

3



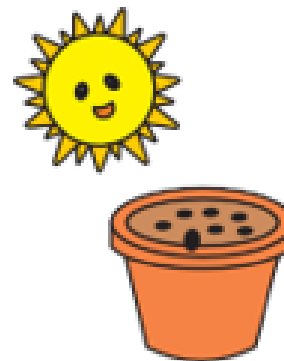
Pour water in the soil.

1



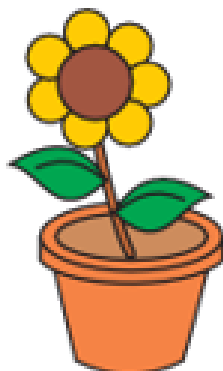
Put soil in the pot.

4



Keep the pot in sunlight.

6



Plant starts to grow.

2




Drop seeds in the pot.





ACTIVITY ABSTRACTION:


ABSTRACT THE SHAPES FROM OBJECTS


Match the object to its correct shape.


1. 


2. 


3. 


4. 


5. 

a. 

b. 

c. 

d. 

e. 



EXERCISES:

A. Mark the correct steps of the following procedure.

1. Use a wooden spoon to stir once.
2. Pour some fresh water and bring it to boiling pan.
3. Cover the pot tightly with a lid.
4. Add rice to the boiling water.
5. Gently fluff the rice with a fork.
6. Cover the pot and let rice simmer for about 15 minutes.

3

1

5

2

6

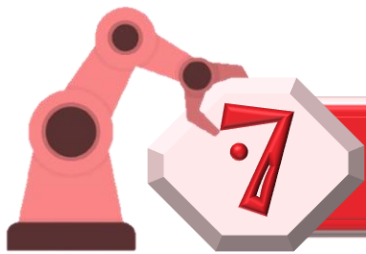
4

B. Fill in the blanks.

1. Step-wise thinking
2. Sequence
3. Abstraction

C. Answer the following questions.

1. Step-wise thinking is a kind of thinking activity with a purpose or goal in mind.
2. Abstraction means to focus on important information and ignore the rest.



EXERCISES:

A. Tick [☑] the correct answer.

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

B. Write 'T' for True and 'F' for False statements.

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

C. Fill in the blanks.

1. Coding area 2. Program 3. Sprite 4. Operators
5. Pen

D. Define the following.

1. **Stage:** It is the place where you see your stories, games, and animations come to life.
2. **Coding area:** It is the place where you make your programs in Scratch by assembling blocks there.
3. **Program:** A program is a set of repeatable instructions that you can store up to carry out later.

E. Answer the following questions.

1. Two advantages of Scratch are:
 - a. You do not have to remember or type any commands; they are all on the screen, so you just need to drag and drop them.
 - b. Commands or blocks fit together like jigsaw pieces, so there are clear visual hints about how you can combine them.
2. Scratch projects are made up of objects or characters called sprites. You can give instructions to a sprite, telling it to move, play music, or interact with other sprites.
3. Categories of blocks present in Scratch window are:
Motion, Looks, Sound, Events, Control, Sensing, Operators, Variables, My Blocks
4. Code tab shows you any script that currently exists.
Costumes tab allows you to create, edit, or copy the image of the sprite on screen.

F. Application-based Question.

By clicking on green flag.

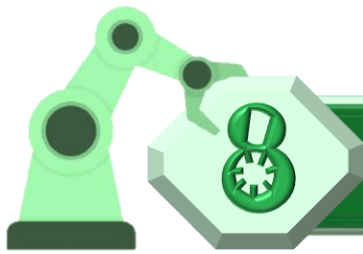


ACTIVITY LABEL:

Label the following window.

The image shows the Scratch 3.20.1 interface with several components labeled with red boxes and arrows:

- Menu Bar:** Located at the top, containing 'File' and 'Edit' menus.
- Tabs:** Located below the menu bar, showing 'Scratch Project'.
- Coding Area:** The central workspace where scripts are written.
- Green Flag:** A green flag icon in the top right corner of the coding area.
- Stop Button:** A red stop icon in the top right corner of the coding area.
- Stage:** The area where the scene is displayed, containing the **Sprite** (a cat) and the **Sprite Info Pane**.
- Blocks:** A vertical palette on the left side containing various code blocks categorized by Motion, Looks, Sound, Events, Control, Sensing, Operators, Variables, and My Blocks.
- Script:** A specific block of code (move 10 steps, turn 15 degrees, set costume, move 10 steps) placed in the coding area.
- Blocks Palette:** The entire vertical area containing the block categories.
- Add Extension:** A button at the bottom left of the blocks palette.
- Sprites List:** A list of available sprites at the bottom of the stage area.
- Choose a Sprite:** A button to select a sprite from the list.
- Choose a Backdrop:** A button to select a backdrop for the stage.



AI vs. Human Intelligence

ARTIFICIAL INTELLIGENCE



EXERCISES:

A. Tick [] the correct answer.

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

B. Write 'T' for True and 'F' for False statements.

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

C. Fill in the blanks.

1. mimics 2. speed 3. weak 4. Sophia
5. dataset

D. Differentiate between the following.

Weak AI: Machines powered with weak AI are designed and trained for a particular task.

Strong AI: Machines with strong AI can think and accomplish complex tasks on their own without human interference.

E. Answer the following questions.

1. Features of human Intelligence are:
a. Problem-solving and decision-making.
b. Reasoning and planning.

2.

COMPARISON	HUMAN INTELLIGENCE	ARTIFICIAL INTELLIGENCE (AI)
Nature	Human Intelligence is natural.	AI is artificial.
Decision-making	Human decision can be biased.	Decision-making capability of AI is unbiased.

3. As you start to draw the object, Quick, Draw! starts yelling out words and phrases it thinks you are trying to illustrate.

F. Application-based Question.

Strong AI (Adaptability)

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Worksheet - I

Chapters 1 - 4

A. Tick [☑] the correct answer.

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

B. Write 'T' for True and 'F' for False statements.

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

C. Fill in the blanks.

1. Storage 2. App 3. Text 4. Rotation
5. shape

D. Define the following.

1. **Hardware:** All the physical equipment that are attached to a computer are collectively called hardware.
2. **Warm booting:** The process to restart a computer that is already on is called warm booting.
3. **Formatting:** Formatting means making any changes to the text of the document so that it should look eye-catching and attractive.
4. **Font:** A font is a typeface that defines the shape of each character. You can change the font style of the text to make changes in the appearance of the document.

E. Answer the following questions.

1. The working of a computer is based on the following principle:
INPUT->PROCESS->OUTPUT
 - a. Computer accepts data in the form of input.
 - b. It processes the data as per requirement or instructions.
 - c. It shows the result in the form of output.
2. Software is a set of instructions that tells a computer what to do and how to perform a particular task.

3. Interface provides simpler ways for the users to use the computer. User interacts with operating system through its user interface.
Two types are:
 - a. Command Line interface (CUI)
 - b. Graphical user interface (GUI)
4. Paint 3D stickers come in the form of shapes like lines, curves, squares, and stars; traditional stickers like cloud, spiral, rainbow, and facial features; and surface textures.
5. Increasing the size makes reading of the text easier while decreasing the size helps fit more text on a page.

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Worksheet - II

Chapters 5 - 8

A. Tick [☑] the correct answer.

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

B. Write 'T' for True and 'F' for False statements.

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

C. Fill in the blanks.

1. Web browser 2. Step-wise thinking 3. Operator
4. Planning

D. Define the following.

1. **Homepage:** Whenever you open a web browser, the first page that appears is the home page. It always displays the starting web page of a website.
2. **Sequencing:** It is the particular order in which instructions are performed in an algorithm.
3. **Script:** It is also known as program. It is a collection of stepwise instructions given to the sprite in the form of stack of blocks.
4. **Quick, Draw!:** It is a free online game developed by Google.

E. Answer the following questions.

1. Uses of internet are:
Emailing, information searching, shopping or chatting.
2. Social networking is a service that enables you to connect with people who share similar personal or professional interests.
3. Step-wise thinking is a kind of thinking activity with a purpose or goal in mind.

4. Two advantages of Scratch are:
 - a. You do not have to remember or type any commands; they are all on the screen, so you just need to drag and drop them.
 - b. Commands or blocks fit together like jigsaw pieces, so there are clear visual hints about how you can combine them.
5. Pen is used to draw shapes using different colors and sizes. By default, Pen is not located in the Blocks category. To use Pen, you have to enable it from Extensions.
6. Features of human intelligence are:
 - a. Problem-solving and decision-making.
 - b. Reasoning and planning

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