

## CHAPTER 3

### COMPUTER MEMORY AND STORAGE DEVICES

#### **II. Answer the following**

1. What is computer memory? Explain its classification with the help of a diagram.  
The storage capacity of a computer is called its memory. Memory enables the computer to store data, instructions and information. For diagram refer pg. no 28 in textbook.
2. What are binary digits? How are they used to measure computer memory?  
A computer works with only two digits – 0 and 1. These digits are called binary digits or bits. The memory of a computer is represented in bytes, where 1 byte = 8 bits. A byte is denoted by B. So, 1 B = 8 bits.
3. Why is primary memory also called random access memory?  
Primary memory is the main area in a computer where data, instructions, and information are stored. As the CPU can randomly access any storage location in this memory, it is also called Random Access Memory (RAM).
4. What are the main features of ROM? Name the different types of ROM.
  1. ROM can also be directly accessed by the CPU.
  2. The data and instructions stored in ROM are retained even when the computer is switched off. It is also known as non-volatile memory.

The different types of ROM are PROM, EPROM, and EEPROM.

5. Why do we need secondary memory? Name any three secondary storage devices.  
Primary memory is volatile and has limited capacity. Secondary memory has a larger storage capacity, and from which data and programs are not lost when the computer is turned off. Such type of memory is called secondary memory.

#### **III. Application based questions**

- a. Diya wants your help in choosing appropriate storage devices for the following tasks:
  - i. Her sister wants to store 200 MB data for a class project.

**Ans:** CD/Flash drive

ii. Her father wants to store 20MB of official documents and files.

**Ans:** CD/Flash drive

iii. The Administration office in her school wants to store 500GB of backup data containing information about all students and teachers.

Name the secondary storage devices that could be used in each of these cases.

**Ans:** Hard disk

b. Ritu wants to buy a flash drive to store a few images and some songs, but her brother wants to buy a hard drive.

i. Which of these devices has more storage capacity?

**Ans:** Hard disk

ii. Which of the two devices would be more suitable to store this data?

**Ans:** Flash drive

iii. What are the full forms of GB and TB? Name any two units smaller than GB.

**Ans:** GB – GigaByte; TB – TeraByte; Smaller units are KiloByte (KB) and MegaByte (MB)

## Worksheet 1

### a. Match the following

Column a

1. Bits

2. Nibble

3. Byte

4. 1 KB

5. 1 GB

Column b

a. 8 bits

b. 1204 MB

c. 0 and 1

d. 4 bits

e. 1024 B

**Ans:**      1. c              2. d              3. a              4.e              5. B

**b. Unjumble the letters to form words:**

1. RYEMOM - MEMORY
2. NABIRY - BINARY
3. RYMARIP - PRIMARY
4. LETIOLAV - VOLATILE
5. REEMOP - EEPROM

**c. Expand the following**

1. RAM - Random Access Memory
2. ROM - Read Only Memory
3. PROM - Programmable Read- Only Memory
4. EPROM - Erasable Programmable Read-Only Memory
5. EEPROM - Electrically Erasable Programmable Read-Only Memory

**Chapter 4**

**Windows 7**

**I. Answer the following**

1. What is desktop? Name any two icons that you see on the desktop.

The first screen appears after the booting process is called desktop. The two icons that we see on the desktop are:

- 1) Recycle bin 2) Computer.

2. Define the following:

- a. File
- b. Folder

File: A file is a collection of data, information. Files are of many kinds-data files,

movie files.

Folder: A folder is a location for organizing and storing files. A folder may contain programs, files, etc.,

3. What is a screen saver? How will you set a screen saver on your computer such that it appears if your computer stays idle for more than 10 minutes?

The image left idle on computer for certain amount of time is called screen saver.

#### SETTING THE SCREEN SAVER:

Click on personalization->screen saver->wait box (11 min)->apply->ok.

4. List the steps you would follow to add 2 hours to the time on your computer.

To add 2 hours to the time of the computer:

Step1: click on (date and time on taskbar->change date and time settings->change date and time button)

Step 2: click on (hour and increase the arrow->ok)

5. How can you decrease the volume of your computer speaker? How can you mute it?

Click speaker button on task bar and move the slider down. To mute click on mute speaker.

6. Write the ways to working with multiple windows?

- Aero peek.
- Aero flip 3D option.
- Keyboard.
- Snap feature.

7. What is window theme?

The window theme is a set of background, pictures, window colors and sounds.

8. What are icons? Name any two icons.

The desktop contains small pictures with names.

Ex: computer, recycle bin.

9. What is mean by Wallpaper?

The background image on the desktop of a computer.

10. What is mean by booting?

When you switch on a computer, the windows operating system gets loaded into the computer memory automatically. This process is called booting.

## II. Application based questions

1. Rahul was preparing a school project on his computer. He noticed that he had opened several windows while working. He wanted to close the ones he did not need. Explain any two ways in which he can preview all open windows.

**Ans:** 1. Using Aero Peek

2. Using the Aero Flip 3D or the keyboard.

### Worksheet 1

Identify the icons given below:

1.



**Notepad**

2.



**Paint**

3.



**WordPad**

4.



**Recycle Bin**

5.



**Folder**

6.



**Windows Start**

## Chapter -5

### Primitives of MSWLogo

#### I. Answer the following

1. How is the SETH command different from the RT command?

SETH	RT
SETH command will rotate in clockwise direction upto 360degrees without using RT & LT command.	RT command will rotate in clockwise direction upto 90 degrees.

2. Write the command that you would use to draw a regular polygon with N sides.

To draw regular polygon with N sides: REPEAT [FD 100 RT 360 / N].

3. The command to draw a circle in MSWLogo is written as REPEAT 360 [FD 1 RT 1]. What changes would you make to this command to draw a

- a. Smaller Circle?                      b. larger circle?

To draw a smaller circle: REPEAT 360[FD 1 RT 2]

To draw a larger circle: REPEAT 360[FD 2 RT 1]

4. Write the command that you would use to set the width of the pen to 3 units.

The command to set the width of the pen 3: SETPENSIZE [3 3]

5. Write the commands to do the following:

- a. Set the color of the pen to yellow      b. Set the fill color to black

(The RGB values for yellow are [255 255 0], and for black are [0 0 0])

To set the color of the pen yellow:

SETPENSIZE [255 255 0]

To set the fill colour to black:

REPEAT 4[FD 100 RT 90]

PU

RT 30 FD 20

```
SETFLOODCOLOR [0 0 0]
```

```
FILL
```

```
HT
```

## II. Application – based questions

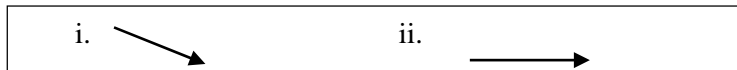
1. Saina has executed the following commands:

i. RT 60 RT 90 FD 100

ii. RT 60 SETH 90 FD 100

Draw the output that you get in each case. Are the outputs the same or different?

Why?



The outputs are different because RT 90 turns the turtle from its current position, whereas SETH 90 turns the turtle from its Home position.

2. Amrita wanted to draw two triangles in MSWLogo with a small gap between them.

She typed the following commands:

```
REPEAT 3 [FD 100 RT 120]
```

```
PU
```

```
RT 90 FD 200 LT 90
```

```
REPEAT 3 [FD 100 RT 120]
```

However, the output showed only one triangle. Why? Write the correct commands for her so that she sees two triangles on the screen.

The output shows only one triangle because Amrita did not cancel the PU command with the PD command. To see two triangles, insert the PD command as given.

```
REPEAT 3 [FD 100 RT 120]
```

```
PU
```

```
RT 90 FD 200 LT 90
```

```
PD
```

```
REPEAT 3 [FD 100 RT 120]
```

## Worksheet 1

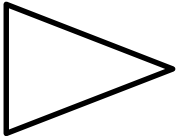


### A. Expand the following:

1. PU - PENUP

- 2. PE - PENERASE
- 3. PD - PENDOWN
- 4. FD - FORWARD
- 5. BK - BACKWARD
- 6. CS - CLEARSCREEN

**B. Complete the following**

Write the commands that you would use to draw the figures given below in Column A. Then, write the REPEAT commands for each in Column B.

Figure	Column A	Column B
1. Triangle 	FD 100 RT 120  FD 100 RT 120  FD 100 RT 120	REPEAT 3 [FD 100 RT 120]
2. Square 	FD 100 RT 90  FD 100 RT 90  FD 100 RT 90  FD 100 RT 90	REPEAT 4 [FD 100 RT 90]
3. Rectangle 	FD 100 RT 90 FD 200 RT 90  FD 100 RT 90 FD 200 RT 90	REPEAT 2 [FD 100 RT 90 FD 200 RT 90]