

Lesson I

Memory and Storage devices.

Answer the following:

- **What is data and information? Explain with an example.**

Ans: Data is a collection of facts and figures given to the computer for processing. **Example:** Names and addresses of students.

The result obtained after processing of data is called information. **Example:** Mark Sheet of student.

- **What are the different types of computer memory?**

Ans: The different types of computer memory are primary memory and secondary memory.

- **Why are the programs and instructions essential for a computer to work need to be stored in ROM? What would happen if they were stored in RAM?**

Ans: The programs and instructions are stored in ROM because ROM retains its contents even when the computer is turned off.

If they were stored in RAM, all the data would have been lost when the computer is turned off.

- **What are data storage units? Write the different types of storage units and their relationships.**

Ans: Data storage units are used to measure computer memory.

Relationship between different units of computer memory are;

8 bits = 1 byte

1024 bytes = 1 Kilobyte

1024 KB = 1 Megabyte

1024 MB = 1 Gigabyte

1024 GB = 1 Terabyte

1024 TB = 1 Petabyte

1024 PB = 1 Exabyte

1024 EB = 1 Zettabyte

- **What is the need of secondary storage devices? List some examples.**

Ans: Secondary storage devices are used to store data permanently. Some examples are: CD, Pen Drive, DVD, Hard disk.

- **Why is hard disk considered an important secondary storage device?**

Ans: Hard disk is considered an important secondary storage device

because it stores the operating system, software applications and all the files and folders.

- **What are the different types of CDs? How are they different from each other?**

Ans: Different types of CDs are:

- **CD-R (Compact Disc – Recordable)** – Data can be written to this CD only once.

- **CD- RW (Compact Disc – Rewritable)** –Data can be rewritten to this CD after erasing the stored data.

- **Compare the storage capacities of a hard disk and a blu-ray disc.**

Ans: The storage capacity of a hard disk is 250 GB to 3 TB and Blu-ray disc is up to 25 GB.

- **What advantage does a USB flash drive have over other storage devices?**

The advantages of a USB flash drive over the other devices are:

Ans: a) It is small in size and portable.

b) It is a durable device.

c) Writing and erasing speed is high.

D) It keeps the data safe and secure.

Exercises from the book

A: TEST YOURSELF

1. data
2. ROM
3. When the computer is switched off all data stored in ROM is lost.
4. .secondary memory
5. C.1024 MB
6. Binary digits
7. MB and GB
8. Hard disk
9. Flash drive
10. Blu ray disc

B Fill in the blanks

- **RAM and ROM** are the two types of primary memory.
- **ROM** is also known as permanent or non volatile memory.
- The memory of a computer is represented in **bytes**
- The storage capacity of a hard disks ranges from **250 GB to 3 TB**
- **Kingston Technology Corporation** is a leading manufacturer of pendrives.

D: Write true or false

- Secondary memory devices store data temporarily. **FALSE**
- A computer can understand only two digits: 0 and 1. **TRUE**
- A hard disk is the most important secondary storage device of a computer. **TRUE**
- A compact disk can store up to 25 GB of data. **FALSE**
- We cannot rewrite data onto a USB flash drive. **FALSE**

F. Complete the crossword with the help of the clues given below.

5. Processed data. **INFORMATION**

6. Another name for ram. **VOLATILE**

1. It can hold up to 25 GB data. **BLURAY**

2. Another name for secondary memory. **AUXILIARY**

3. Stores the operating system, software applications ,files and folders of a computer. **HARDDISK**

4. The smallest unit of a computer memory. **BIT**

True or false (Page no.6)

1. A computer needs data to work - True.

2. Ram contain programs and instructions - False

3. RAM requires power to keep the data accessible - True

4. The data stored in secondary memory does not get erased when the computer is shut down - True

5. A bit is the memory needed to store a single letter or number - False.