

Worksheet – 4      Subject: - Computer    Class: - V    Teacher: - Mrs. Suudha Sharma  
 Name: \_\_\_\_\_      Class & Sec: \_\_\_\_\_      Roll No. \_\_\_\_\_      Date: 30.04.2020

### Lesson 1: DEVELOPMENT OF COMPUTERS

#### MEASURING MEMORY CAPACITY

In a computer all signals are in an electrical form, they can be either ON or OFF. If 1 represents ON, and '0' represents OFF, then it is clear that the computer understands the language of '0's and '1's. These '0's and '1's are called the Binary Digits.

#### BINARY DIGITS

A computer understands only the binary language which consists of binary digits.

- 0 and 1 are called Binary Digits.
- The language consisting of these Binary digits is called Binary Language.
- Each 0 and 1 is called a bit, which is the smallest unit to measure the memory.

#### CAPACITY OF STORAGE DEVICES

From the table below, you can see the measurement units of the memory.

Each 0 or 1	1 Bit
8 Bits	1 Byte
1024 Bits	1 Kilobyte (KB)
1024 KB	1 Megabyte (MB)
1024 MB	1 Gigabyte (GB)
1024 GB	1 Terabyte (TB)

#### **1 Character is stored in one byte.**

Capacities of some common storage devices are given below:

- The capacity of a hard disk can be 160 GB, 500 GB, 1TB or more.
- The capacity of a CD is approximately 700 MB.
- The capacity of a DVD ranges from 4.3 GB to 17 GB.
- The capacity of Blu-ray disc is 50 GB.
- The capacity of pen drives ranges from 1 GB to 64 GB and more.

#### MARK 1

- It is one of the early computers.
- MARK 1 was invented by Horward Aieken in 1941.
- It worked automatically and did not required manual operations.

**Now, answer the following questions, based on all the previous worksheets.**

#### Q1. Tick (✓) the correst anserws.

1. Thefirst calculating device was:

- a) ENIAC                      b) Mark I                      c) EDVAC                      d) ABACUS

2. Which device was made of rods with numbers printed on them?

- a) Abacus                      b) Napier's Bones                      c) Pascaline                      d) UNIVAC I

3. The first successful commercial computer was:

- a) Abacus                      b) ENIAC                      c) EDVAC                      d) UNIVAC I

4. Which device did Charles Babbage develop in 1833?

- a) Abacus                      b) ENIAC                      c) UNIVAC                      d) Analytical Engine

**Q2. Write (T) for True and (F) for False against the statements.**

1. Abacus was the first calculating device. (     )
2. UNIVAC was developed in 1951. (     )
3. Laptop can fit in your pocket. (     )
4. CPU chip is fitted on the motherboard. (     )
5. A CU in a CPU does all the calculations and comparisons. (     )
6. RAM is a permanent memory. (     )
7. Storage devices are also known as secondary memory. (     )
8. 1,2 are known as Binary digits. (     )
9. 1024 MB= 1 kilobyte. (     )

**Q3. Fill in the blanks:**

1. Napier's bones was invented in 1617 by \_\_\_\_\_.
2. Pascaline was invented by \_\_\_\_\_ in 1642.
3. \_\_\_\_\_ is the temporary memory.
4. \_\_\_\_\_ and \_\_\_\_\_ are components of a cpu.
5. \_\_\_\_\_ memory consists of storage devices.
6. 0 and 1 are called \_\_\_\_\_ digits.
7. 1024 GB makes one \_\_\_\_\_.

**Q4. Match the following**

**Column A**

**Column B**

- |                 |  |
|-----------------|--|
| 1. Abacus       | a. Chip inside the system unit that is responsible for all the computations inside the computer. |
| 2. Portable PCs | b. First device used for doing calculations.   |
| 3. CPU          | c. PCs Designed to be carried easily.  |
| 4. CU           | d. First General Purpose Computer  |

5. ROM e. Holds the data, programs and results temporarily while you are working on the computer.
6. RAM f. Part of a CPU that directs its information.
7. ENIAC g. Helps the computer to know what to do when it boots up.

**Q5. Answer in one word/sentence.**

1. Write name of computers invented by Mauchly & Eckert.
2. Which was the first general purpose computer?
3. What does ALU do?
4. What is the main circuit board in a computer system called?
5. Which memory consists of storage devices? Name some of these.
6. How can Primary memory be classified?
7. Why is RAM called temporary memory?

**Q6. Answer the following:**

1. Write the name of computers that existed before the PC.
2. Write a difference between Laptop and Tablets.
3. Write about the binary digits and the binary language.
4. Make the Storage Unit Table.
5. When there were no calculating devices, how did people count?
6. Which was the first computer that required no human interventions?
7. Why tablets are becoming more popular day by day?

**HOMEWORK**

Complete all four worksheets related to chapter 1 and learn for test in next class.

## ANSWERS

**Lesson 1: Development of Computers****Q.1. Tick the correct answers.**

1. ABACUS
2. Napier's Bones
3. UNIVAC I
4. Analytical Engine

**Q.2. Write (T) for True and (F) for False against the statements.**

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

**Q.3. Fill in the blanks**

1. John Napier
2. Blaise Pascal
3. RAM
4. ALU and CU
5. Secondary
6. Binary
7. Terabyte

**Q.4. Match the following**

3
1
2
7
6
4
5

**Q.5. Answer in one word/sentence.**

1. ENIAC
2. ENIAC
3. The major operations performed by the ALU are addition, subtraction, multiplication, division, logic (True/False) and comparison.
4. CPU
5. Secondary Memory.
6. Primary memory can be classified into RAM and ROM
7. RAM is called temporary memory because its content gets erased when the computer is switched off.

**Q.6. Answer the following**

1. The name of computers that existed before the PC are as follows:

- a) Abacus
- b) Napier Bones
- c) Pascaline
- d) Analytical Engine
- e) ENIAC I
- f) EDVAC
- g) UNIVAC 1

2. Laptop: - It is a portable PC which is small enough to be placed on your lap and work upon.

Tablets: - It is a one piece mobile computer, mainly operated by a touch screen on which you work with your finger touch.

3. A computer understands only the binary language which consists of binary digits.

- 0 and 1 are called Binary Digits.
- The language consisting of these Binary digits is called Binary Language.
- Each 0 and 1 is called a bit, which is the smallest unit to measure the memory.

4.

Each 0 or 1	1 Bit
8 Bits	1 Byte
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1024 KB	1 Megabyte (MB)
1024 MB	1 Gigabyte (GB)
1024 GB	1 Terabyte (TB)

5. When there were no calculating devices, People used to count and calculate using knots in ropes, notches in sticks, scratches on rocks and drawing lines on ground when there were no devices to compute.

6. MARK 1 was the first computer that required no human interventions.

7. Tablets are becoming more popular day by day because:

- They are very compact in size.
- They are very fast.
- They are easy to carry.
- Affordable cost.
- Provides all the features of a computer.