

Ms. Iqra

CLASS 7 UNIT 1 HARDWARE BASICS

Motherboard or system board is a main circuit board. All the computer components are plugged or connect with it.

2: Differentiate b/w the following:

(i) Hardware	Software
The physical parts of the computer that we can see and touch are known as hardware.	is the set of instructions given to the computer to perform a specific task. For example: Microsoft windows, MS Word, coral draw, device drivers etc.

Define the following:

(i) System unit:

System unit is a box where processing takes place. It consists of the main circuit board, processor, power supply, storage device etc.

MEMORY:

(ii) Memory consists of electronic chips. Memory stores instructions and data so that CPU can process them.

Memory has two types

- > RAM (random Access memory)
- > ROM (read only memory)

(ii)

RAM	ROM
Ram stands for random access memory. It is a temporary storage area for data before and after it is processed. It is attached to the motherboard.	ROM stands for read only memory. It is a permanent storage area. It contains start up instructions of the computer and information about its hardware device.

(iii) PROCESSOR:

It works like a human brain. It is a silicon chip fixed on the motherboard. Its primary purpose is to carry out set of instructions

And process the data efficiently and accurately it is also known as CPU.

(iii) EXPANSION SLOT	EXPANSION CARDS
An expansion slot is a long narrow socket on the motherboard into which different expansion cards can be plugged in.	An expansion card is a small circuit board. It gives a computer the capability to control a storage device, an input device or an output device.

(iv) ARITHMETIC LOGIC UNIT (ALU):

It is an input device that gathers information by reading a barcode.

(v) MOTHERBOARD:

AU (iv)	LU
Arithmetic logic performs Addition, subtraction, multiplication and division.	Logical unit compares two quantities and gives answers in the form of

	true or false.
--	----------------



3. What is read only memory?

ROM:

ROM stands for read only memory it is a permanent storage area. It contains start up instructions of the computer and information about its

✓ INPUT DEVICES	OUTPUT DEVICES
Devices which are used to enter data into a computer are known as input devices i.e keyboard, mouse, scanner etc.	devices which are used to display output are known as output devices i.e. monitor, printer etc.

hardware device.

It is fixed on the motherboard. ROM is nonvolatile, i.e. information is not lost when the power is switched off data cannot be changed or removed from the RAM that is why it is called read only memory.

Give the brief answer:

1. Define the brain of the computer and write down the names of its component?

PROCESSOR:

Processor works like a human brain. It is a silicon chip fixed to the motherboard. Its primary purpose is to carry out a set of instructions and process the data efficiently and accurately. It is also known as CPU.

The two main components of a processor are ALU (arithmetic logic unit)

And CU (logical unit).

ALU further has two parts, AU (arithmetic unit) and LU (logical unit)

2. What are the main functions of the arithmetic logic unit?

ARITHMETIC UNIT:

AU is a part of ALU that performs mathematical operations such as addition, subtraction, multiplication and division.

For example:

$$2+2=4$$

$$4-1=3$$

4. Write down the three main uses of the fingerprint reader?

FINGERPRINT READER:

It is a device that captures a fingerprint and transcodes it into a digital code. This code is compared with the already stored information in the computer.

Fingerprint reader is mostly used for criminal investigation and security systems. Some computers use it for login and user authentication.

5. What is the main function of a reboot?

It is an electronic machine which has the ability to interact with physical objects. They are also known as mechanical agents.

Reboots are used in different fields such as car manufacturing, medicine, military, transportation etc.

blong → How many expansion slots
are there in computer, write their names.
There are three different types
of slots:

ISA (industry standard
architecture)

PCI (peripheral
component interconnect)

AGP (accelerated
graphics port)

7. Write the names of the major
expansion cards and explain
two of them?

There are four major types of
expansion cards

Sound cards

Graphics card

Network interface card

Modem

The latest or the most advanced stage
in the development of the computer
technology is known as cutting edge
technology

(1) Barcode reader

(2) Fingerprint reader

(3) ~~robot~~ Robots

10. Why RAM is called volatile
memory?

RAM is a volatile, i.e. information is
lost when the power is switched off
e.g.

Someone is typing a letter on the
computer and the power goes off the
contents of the letter will be erased
from RAM if it is not saved.

SOUND CARDS:

It allows a computer to
receive sound in digital form and
reproduce it through speakers.

GRAPHICS CARDS:

A graphics card enables
a computer to display output images
on the monitor screen

8. What is information gathered
from barcodes?

Barcode reader is attached to a
computer to translate the information
stored in the form of a barcode

This information includes batch
number and product name etc.

Barcode readers are mostly used in
supermarkets, pharmacy, libraries etc.

9. What is cutting edge
technology? Give some
examples?

UNIT 2

SOFTWARE BASICS

Define the following:

SOFTWARE:

Software is the set of
instructions given to the computer to
perform a specific task

UTILITY PROGRAM:

Utility program is a system
software that allow a user to analyze,
configure it perform a specific task
related to the management of
computer e.g.

Disk cleanup, windows
explorer, windows picture,

Backup, remove programs etc.