

SHREE H. N. SHUKLA COLLEGE OF I.T. & MGMT.

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Lt. Shree Chimanbhai Shukla

BCA/BSCIT SEM-1 Computer Funda.

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CH-1:- INTRODUCTION OF COMPUTER

Q-1. Definition of Computer

DETAILING:

- Computer is electronic device.
- Word computer come from the word compute.
- Compute means calculation
- So computer is calculation device
- It can perform arithmetic and logical operation.
- Charles babbage was god father of computer.

ONE WORD QUESTION AND ANSWER

SR.NO	QUESTION	ANSWER
1	COMPUTER MEANS _____	CALCULATION

Q-2. Explain Data Processing Cycle

DETAILING:-

Data(input)-----process-----output(result)

- Computer is based on 3 different part like data, process and result.

Data:-

- Data is raw material
- Any information input into computer is called data.

Process:-

- Is a set of code
- **Cpu can perform all the process into the computer.**

Output:

- After complete the process, it generate the output, output means result.

ONE WORD QUESTION AND ANSWER

SR.NO	QUESTION	ANSWER
1	DATA MEANS _____	RAW MATERIAL
2	INFROMATION MEANS	OUTPUT
3	PROCESS MEANS	CALCULATION

Q-3. Explain Characteristics of computer.

DETAILING:

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- Computer is electronics device.
- It has many characteristics like
 - Accuracy
 - Speed
 - Storage capacity
 - Portable in size
 - Multi programming
 - No feeling

1) accuracy :-

- accuracy of computer is very high
- Computer can perform many operation
- In these operation it can perform perfect result with out any error.

2) Speed:-

- Computer is very fast.
- Computer complete all the process with in very less time
- The speed of computer is in micro second
- The speed of computer is very high compare human.
- Computer can perform work in second while human can perform same task the year.

3) Storage capacity:

- Computer can store large amount of data.
- Storage capacity of computer is very large.
- In computer data is store in storage device.
- In compute there is not limit to store our data
- In computer we can store data in long time.

4) Portable in size:-

- Old technology computer is very big in size.
- Day by day technology is very increase.
- So size and weight of computer is reduce.
- Small computer provide portability
- Portable means we can easily transfer one place to other place.
- Now a days computer is very small in size and very less in weight.

5) Multi programming:-

- Computer is multiple work device.
- At the time computer can perform multiple work

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- Like at one moment computer can perform excel, and we can open word and work in it again we can open web browser and search any data . so here in our computer can perform 3 task at the same time.

6) No feeling:-

- Computer is electronic device.
- Computer is machine so it has no feeling.
- Computer can perform any work with help of user.
- We can operate computer 24* 7 .
- Computer is not human so it has no feeling.

ONE WORD QUESTION AND ANSWER

SR.NO	QUESTION	ANSWER
1	SPEED OF COMPUTER IS_____	MICRO SECOND
2	ACCURACY MEANS	PERFECTION
3	VERSATILTY MENAS_____	PERFORM MANY TASK
4	CAN COMPUTER USE EVERY WHERE?	YES

Q-4 Explain use and dis advantages of computer.(2 marks)

Detailing:-

Use of computer:-

- Personal use,in medical sector, in science, in space, in banking , railway,bus reservation, office and many other places.

Disadvantages:-

- Computer can not take any decision because it is machine.
- It always required power.
- With out power computer can not operate.
- There is chance to fail hard ware and soft ware.
- Atmosphere is effect to the part of computer.

Q-5 explain block diagram of computer.

or

Q- Explain Simple Model of Computer.

DETAILING:-

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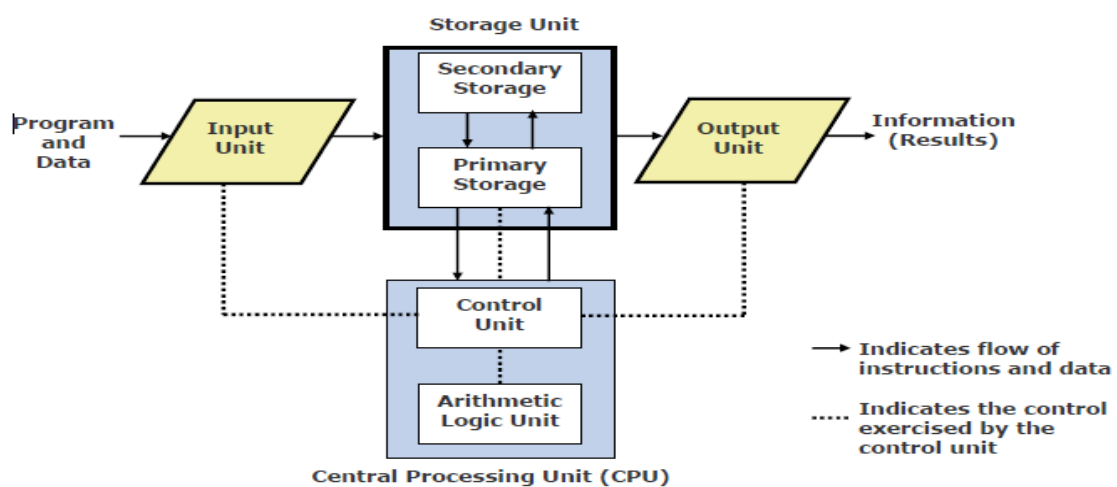
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❖ CPU (Central Processing Unit):-



- In above diagram there are three different part like input ,output and cpu.

❖ Input Unit:-

- An input unit of a Computer system performs the following functions:
 - It accepts (or read) instructions and data from outside world.
 - It converts these instructions and data in computer acceptable form.
 - It supplies the converted instructions and data to the computer system for further processing

❖ Output Unit:-

- An output unit of a computer system performs the following functions :
 - It accepts the results produced by the computer, which are in coded form and hence, cannot be easily understood by us.
 - It converts these coded results to human acceptable (readable) form.
 - It supplies the converted results to outside world.

❖ Storage Device:-

- The storage unit of a computer system holds (or stores) the following:
 - Data and instructions required for processing (received from input devices)
 - Intermediate results of processing
 - Final result of processing, before they are released to an output device

❖ Arithmetic and Logic Unit (ALU) : -

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- Arithmetic and logic unit of a computer system is the place where the actual executions of instructions take place during processing operation.

❖ Control Unit (CU):-

- Cu is real brain of computer.
- Cu is monitor into computer.
- Cu can check all the process into computer and it also monitor to all the input and output device.

ONE WORD QUESTION AND ANSWER

SR.NO	QUESTION	ANSWER
1	GIVE THE INPUT DEVICE NAME	KEYBOARD,SCANNER,MIC ETC
2	CPU MEANS	PROCESSOR
3	ALU MEANS	ARITHMETIC AND LOGIC UNIT
4	I.C MEANS	INTEGRATED CIRCUIT
5	CU MEANS	CONTROL UNIT
6	HOW MANY TYPES OF STORAGE ARE AVAILABLE	2(PRIMARY AND SECONDARY)

Q-6 Explain Classification of Computer by processing speed or size

Or

Explain digital computer.

- There are 4 types of computer like micro, mini, mainframe and super.
- Here all types of computer we can explain.

1) Micro computer:-

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- It is small computer.
- In this computer micro processor is used.
- It is found in 1970 by ibm.
- Personal computer ,desktop computer, laptop are example of micro computer. Currently processor named Pentium-II is available in the market.

2) Mini computer:-

- It is found in 1960 by ibm.
- Mini computer is multi user computer.
- It is capable to support the numbers of user.
- This computer is use into server.

3) Mainframe computer:-

* These are suited to big organizations to manage high volume application.

- It is found in 1970 by ibm.
- Thousand of user can access this computer at the same time.
- It is use in server.
- It has large storage capacity and it has high processing speed.
- This computer can use in large organization.

4) Super computer:-

- Super computer is most powerful and most expensive computer in today's world.
- It can perform lots of work in to micro second.
- In super computer there are 1000 processor available.
- There are more then 500 super computer are available in the world.
- Super computer is very big in size so it has non portable.
- India's first super computer is param.

ONE WORD QUESTION AND ANSWER

SR.NO	QUESTION	ANSWER
1	HOW MANY TYPES OF COMPUTER ARE AVAILABLE IN PROCESSING SPEED	4MICRO,MINI,MANI FRAME,SUPER
2	WHICH COMPUTER PROCESSING SPEED IS VERY HIGH	SUPER COMPUTER
3	NAME OF INDIA'S FIRST SUPER COMPUTER	PARAM

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Q-7. Explain Generation of computers.(m.imp)

Detailing:-

1. First Generation (1942-55):-

- First generation computers were made up of **vacuum tubes**.
- These computers were of very big sizes, expensive consume lot of power.

Limitations

- They were too large in size requiring rooms for installation.
- Thousands of vacuum tubes that were used so it can produce large amount. Hence the air-conditioned required.
- High power consumption and short life span.
- Commercial production of these computers was difficult and costly.
- Limited programming capabilities
- No portable.

2. Second Generation (1955-64):-

- The second generation computers using **transistors** instead of vacuum tubes.
- Compared to vacuum tubes they are in size and having more life.

Advantages

- They were more than 10 times faster than first generation computers.
- They were much smaller in size than first generation computers.
- Requiring smaller space for installation.
- They accept less power than the first generation computers.
- They were much easier to program and use than the first generation computers.

Limitations

- They had more than one transistors to made this type of computers
- It is very difficult and costly.
- Repairing charge is very costly.

3. Third Generation (1964-75):-

- The third generation was based on IC (Integrated Circuits) technology.
- The IC technology was also known as “microelectronics” technology .

Advantages

- They were much more powerful than the second-generation computers.
- Smaller in size as compared to second-generation computers.
- Less power than the second-generation computers.
- Commercial production was easier and cheaper.
- They are portable.

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Limitation

- Third generation computers were located had to be properly air-conditioned.
- Highly sophisticated technology and expensive setup was required for the manufacture of IC chips.

4. Fourth Generation (1975-89):-

- The fourth generation computers were also made by IC technology.
- It is known as Small Scale Integration (SSI).
- After the advance technology in the production of IC chip it was possible to coordinate 100 components on one chip.
- It is known as Medium Scale Integration (MSI).
- Latest and advance IC technology is Very Large Scale Integration (VLSI) in which more than 10 lakhs components can be coordinate on one chip.
- Fourth generation computers were based on LSI technology.

Advantages

- The PCs were much smaller and cheaper as compared to previous generations.
- They consumed much less power than the third-generation computers.
- They had faster and larger primary memory and secondary storage devices as compared to third-generation computers.
- PCs are used for office and home usage.
- The PCs of the fourth generation made computers affordable even by individuals for their personal use at home.

Limitations

- Highly difficult technology required for the manufacture of LSI chips.

5. Fifth Generation (1989 Onwards):-

- This generation computers use the ULSI (Ultra Large Scale Integration) for making IC chips.
- Size of this computer is reduced and speed is increase.
- These computers are very powerful and compact as compared to fourth generation computers.

Advantages

- In this generation PCs are much smaller and handy the PCs of the fourth generation.
- They consume much less power.
- They have faster and larger primary memory and secondary storage devices as compared to other generation.
- They are totally general purpose machines.
- Commercial production of these systems is easier and cheaper.

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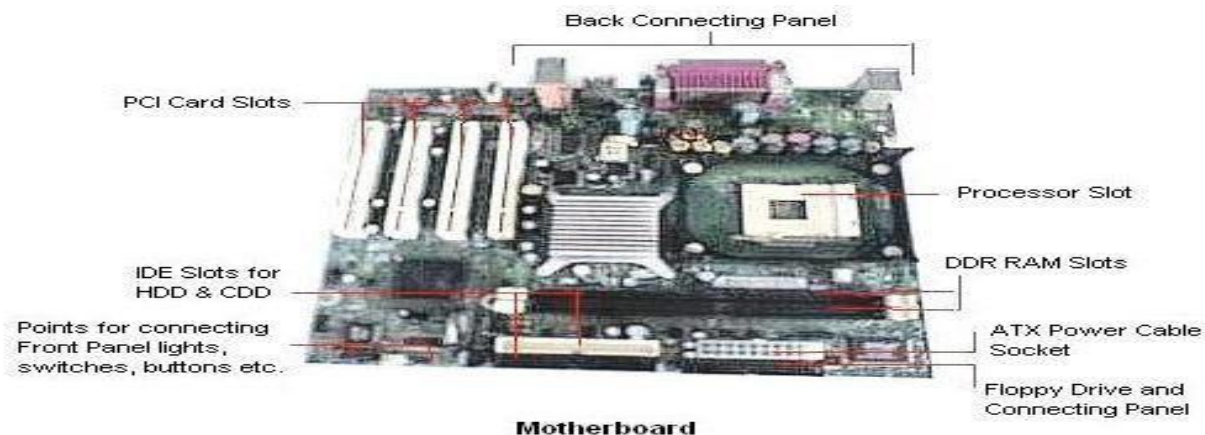
ONE WORD QUESTION AND ANSWER

SR.NO	QUESTION	ANSWER
1	TIME LINE OF 1 ST GENERATION	1942-1955
2	TIME LINE OF 2 ND GENERATION	1955-1964
3	TIME LINE OF 3 RD GENERATION	1964-1975
4	TIME LINE OF 4 TH GENERATION	1975-1989
5	TIME LINE OF 5 TH GENERATION	1989 TO ONEARDS
6	WHICH TECHNOLOGY USE IN FIRST GENERATION	VACCUME TUBE
7	WHICH TECHNOLOGY CAN USE IN 2 ND GENERATION	TRASISTOR
8	WHICH TECHNOLOGY USE IN 3,4,AND 5 TH GENERATION	I.C.

Q-8. Explain Mother Board.

DETAILING:-

- The motherboard serves as a single platform to connect all of the parts of a computer



otherboard connects CPU, memory, hard drives, optical drives, video card, sound card, and other ports and expansion cards directly or via cables.

- It can be considered as the backbone of a computer.

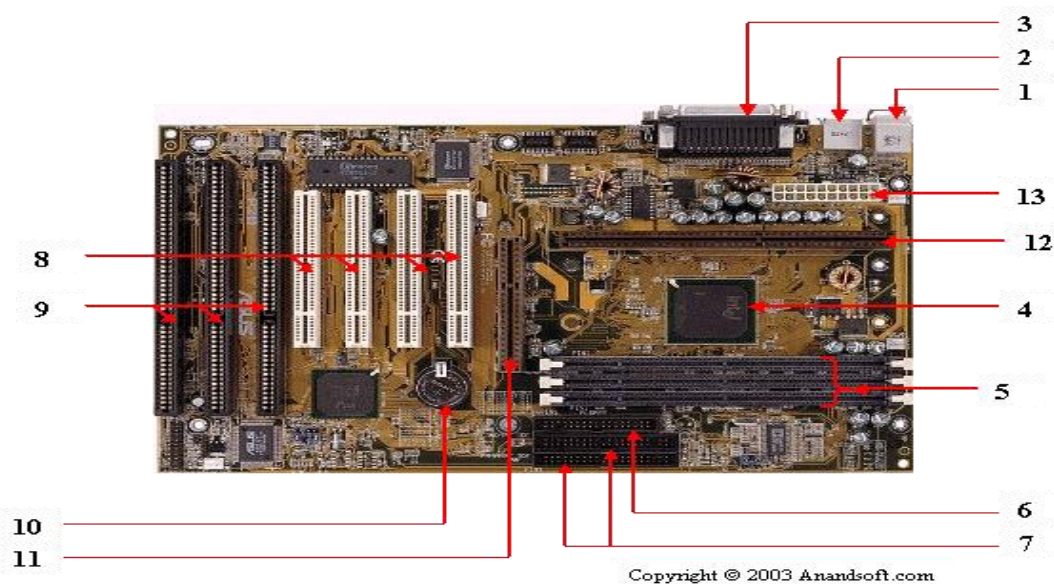
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- Mother board is back bone of computer.
- Mother board is circuit it is located in to cpu.
- We can connect mouse, keyboard, usb, dvd drive and all devices are connect into mother board.
- With out mother board we can not perform any task in to computer.
- To attach device mother use different port of computer.

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Q- explain mother board in detail

Detailing:-

- Mother board is main part of computer.
- Mother board is single plate form to connect all part of computer.
- Mother board is back bone of computer.
- Mother board is circuit board which is located in cpu.
- We can connect mouse, key board ,usb drive and all device into the mother board.
- With out mother board we can not operate computer.
- Mother board is hard ware.
- To attach device in mother board it can use port.

Q- explain computer port in detail

Detailing:-

- Mother board has following ports
- Likes ps2 port, ram port, usb port, agp port, parallel port ,cmos battery.

1)ps2 port:-

- ps2 means play station 2 port.
- it was design by ibm in 1972.
- in this port we can connect mouse and key board.
- it is also called mouse and key board port.
- it is old technology.
- now a days this port are not use.

2) parallel port:-

- parallel port is also called printer port.
- only printer is connect in this port.
- Data transfer speed of this cable is very fast.
- There are 25 pin are available in this port
- It is old technology.
- It is design by ibm.

3) USB PORT:-

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- usb means universal serial bus.
- Usb is connect with mother board.
- this port also design by ibm
- it is latest port of computer.
- now a days more than 139 devices are connect into this port.
- it is plug and play port.
- monitor,printer,mouse, pen drive, camera and many other devices are connect into this device.

5) RAM PORT.:

- Random access memory is ram.
- In this port we can connect only ram.
- More than one ram port are available in motherboard.
- In ram port 168 pins are available.

6) AGP PORT:-

- **Agp means advanced graphics port.**
- **In agp port we can connect agp card, sound card and video card.**
- **It support high resolution and 3d images and movies.**

7) CMOS BATTERY:-

- **Cmos means complementary mettlet oxide semiconductor.**
- **It is used to change date and time of computer.**

→ Intel,asus,ibm aopen,bio star,abit,giga bite and msi are popular manufacturers of mother board.

Q- explain processor in detail

Detailing:-

- Processor is brain of computer.
- Processor tell to compute what to do and where to do?
- It decide which task is important into computer.
- It is also called micro processor ,chip or cpu.
- It perform all the basic operation
- The speed of processor is in mhz.(mega hertz).
- Which means millions of cycle perform in micro second.
- This first micro processor was found in 1971 and it is called 4040 processor.
- 4040, 8080, 8085 and 8088 are oldest processor.
- Latest processor is i2, i3, i4.....

Q- Explain compter Cable in detail.

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DETAILING:-

- To attach different hard ware or device into computer we can use cable.
 - There are many types of cable available like vga cable, usb,rj45,rj11 etc.
- 1) **Vga cable:-**
 - Video graphics array is full form of vga cable.
 - Vga cable is most popular and most common type of cable.
 - Vga cable is used to connect monitor into cpu.
 - Monitor like crt, non crt, lcd and led monitor.
 - Vga cable was found in 1980 by ibm.
 - 2) **Rj45 cable:-**
 - It is network cable
 - It is used to connect internet into computer.
 - It is also use for networking.
 - It is also called network cable.
 - Using this cable we can also connect modem.
 - 3) **Rj11 cable:-**
 - it is special types of cable used to connect telephone into computer.
 - It is old type of cable today.
 - 4) **parallel cable:-**
 - this is special types of cable
 - using this type of cable we can connect hard disk , cd drive and dvd drive
 - this cable is available inside the cpu not out side.
 - It is old cable.
 - 5) **sata cable:-**
 - serial advance technology attachment is full form of sata cable.
 - Sata cable is latest cable.
 - It is used to connect hard disk into mother board.
 - This cable provide high data transfer speed.
 - 6) **usb cable:-**
 - it means universal serial bus.
 - It is latest cable
 - More then 139 device attach with the help of this cable.
 - Monitor, printer ,fax machine, hard disk etc are connect with the help of usb cable.

Q- EXPLAIN SOUND CARD.

DETAILING:-

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- It is also called audio card.
- It support sound into computer.
- Without sound card computer can not play audio.

Q-12 EXPLAIN GRAPHICS CARD.

DETAILING:-

- It is also called video card, video adapter and graphic adapter.
- It support high level graphics 3d image, 3d game and hd videos.

Q-13 EXPLAIN PRIMARY MEMORY(3 MARKS)

DETAILING:

- + In computer there are two types of memory like primary and secondary.
- + Now we can explain what is primary memory?
-
- + Primary memory is also called **main memory.**
- + There are two types of primary memory like ram and rom.
- + These memory insert into cpu(motherboard).
- + Without these memory we can not start our computer.
- + So that's why it is called primary.

Ram:

- + Random access memory.
- + Ram is internal memory
- + It is volatile memory.
- + Ram is also called temporary memory.
- + Ram is made with silicon and plastic material.
- + When pc is switch off then ram is blank.
- + Values in ram are continuously change so that's we can say ram is volatile memory.
- + Ram is insert into motherboard or other circuit board.
- + Ram insert into ram port.
- + Ram is inexpensive.

Rom:-

- + Rom read only memory.
- + It is also called flash memory.

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- + It is also called permanent storage or field storage.
- + In rom data is store permanent and it can be change by only expert.
- + Without rom computer can not working.
- + In rom bios files are available.
- + Rom can not blank when pc is switch off.
- + Rom is non volatile memory.
- + There are 3 types of Rom like

- 1) **PROM**
- 2) **EPROM**
- 3) **EEPROM.**

1) PROM:-

- + Programable read only memory.
- + prom is non volatile because once data is insert then it can never change.

2) Eprom:-

- + Erasable programable read only memory.
- + This types of rom is rewritable.
- + This type of rom is costly.

3) EEPROM:-

- + Electrically erasable programmable read only memory.
- + It can delete bunch of instruction
- + Programmer can re program into it.
- + This type of rom use ultra violet signal to delete information.

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