

# INTRODUCTION TO COMPUTER

The word 'computer' has been derived from the Latin word 'computare', which mean to calculate. A computer is an electronic device that manipulates information or data according to the set of instructions called programs. It has the ability to store retrieve and process data.

- **FUNCTIONS OF COMPUTER**

1. **Input** Information or data that is entered into a computer is called input. Its send data and instructions to the central processing unit (CPU).
2. **Processing** It is the sequence of actions taken on data to convert it into information which is meaningful to the user. It can be calculations comparisons or decision taken by the computer.
3. **OUTPUT** it makes processed data available for the user.it is mainly used to display the desired result to the user as per input instructions.
4. **STORAGE** It stores data and programs permanently .it is used to store information during the time of program execution and possible to get any type of information from it.

- **FEATURES OF COMPUTER**

- 1 **SPEED** the computer can process data very fast at the rate of millions of instructions per second.
- 2 **ACCURACY** computers provide high degree of accuracy. They response the users as per the input instructions.
- 3 **storage capacity** computers are capable to store huge amount of data which depends on the capacity of hard disk.
- 4 **Versatility** computers can do different types of work simultaneously. They can perform multiple task at same time.
- 5 **DELIGENCE** unlike human beings a computer is free from monotony tiredness lack of concentration etc. and can work for hours without creating any errors.

## GENERATION OF COMPUTER

A generation refers to the state of improvement in the development of system each generation of computer is characterised by a major technical development that fundamentally changed the way computers operate.

Generations	Switching devices	Storage Devices	Operating system programming language	Characteristics	Applications
First (1940-56)	Vacuum tubes	Magnetic Drums (milli seconds)	Batch operating system machine language (Binary numbers 0's and 1's)	<ul style="list-style-type: none"> <li>• Fastest computer devices</li> <li>• Generate large amount of heat.</li> <li>• Non portable</li> </ul>	<ul style="list-style-type: none"> <li>• Used more scientific purpose.e.g.- ENIAC,UNIVAC,MARK-1,etc</li> </ul>
Second (1956-63)	Transistor (made up of semiconductors)	Magnetic core technology (micro seconds)	Time sharing OS,multitasking OS/Assemble language high level language	<ul style="list-style-type: none"> <li>• More reliable and less prone to hardware failure</li> <li>• Portable and generate less amount heat</li> </ul>	<ul style="list-style-type: none"> <li>• Used for commercial production .E. G.-PDP-8 IBM-1401,etc</li> </ul>
Third (1964-71)	Integrated circuits (IC)(made of silicon)	Magnetic core as primary storage medium (nanoseconds)	Real time system high level (FORTRAN COBOL ALGOL)	<ul style="list-style-type: none"> <li>• Consume less power</li> <li>• Highly sophisticated technology required</li> </ul>	<ul style="list-style-type: none"> <li>• Data Base management system</li> <li>• E.G. NCR-395, B6500, etc.</li> </ul>
Fourth (1971-present)	Large scale integrated (LSI) Circuit microprocessor	Semiconductor memory Winchester disc (Pico seconds)	Time sharing PASCAL ADA, COBAL -74 FORANIV	<ul style="list-style-type: none"> <li>• More reliable and portable</li> <li>• This generation lead to better communication and resource sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Electronic fund transfer, Distributed system E.g. – Intel 4004 chip, Macintosh</li> </ul>
Fifth(present and beyond)	Super large scale integrated (SLSI) chips	Optical disc	Knowledge information processing system	<ul style="list-style-type: none"> <li>• Parallel processing</li> <li>• Intel core microprocessor is implemented</li> <li>• Enable mega chips</li> </ul>	<ul style="list-style-type: none"> <li>• Artificial intelligence E.G.- Robotic</li> </ul>

# FUNDAMENTAL OF COMPUTERS

QUESTION 1 What is computer?

Answer computer is an electronic Device which perform three basic tasks , i.e. inputting, processing & outputting.

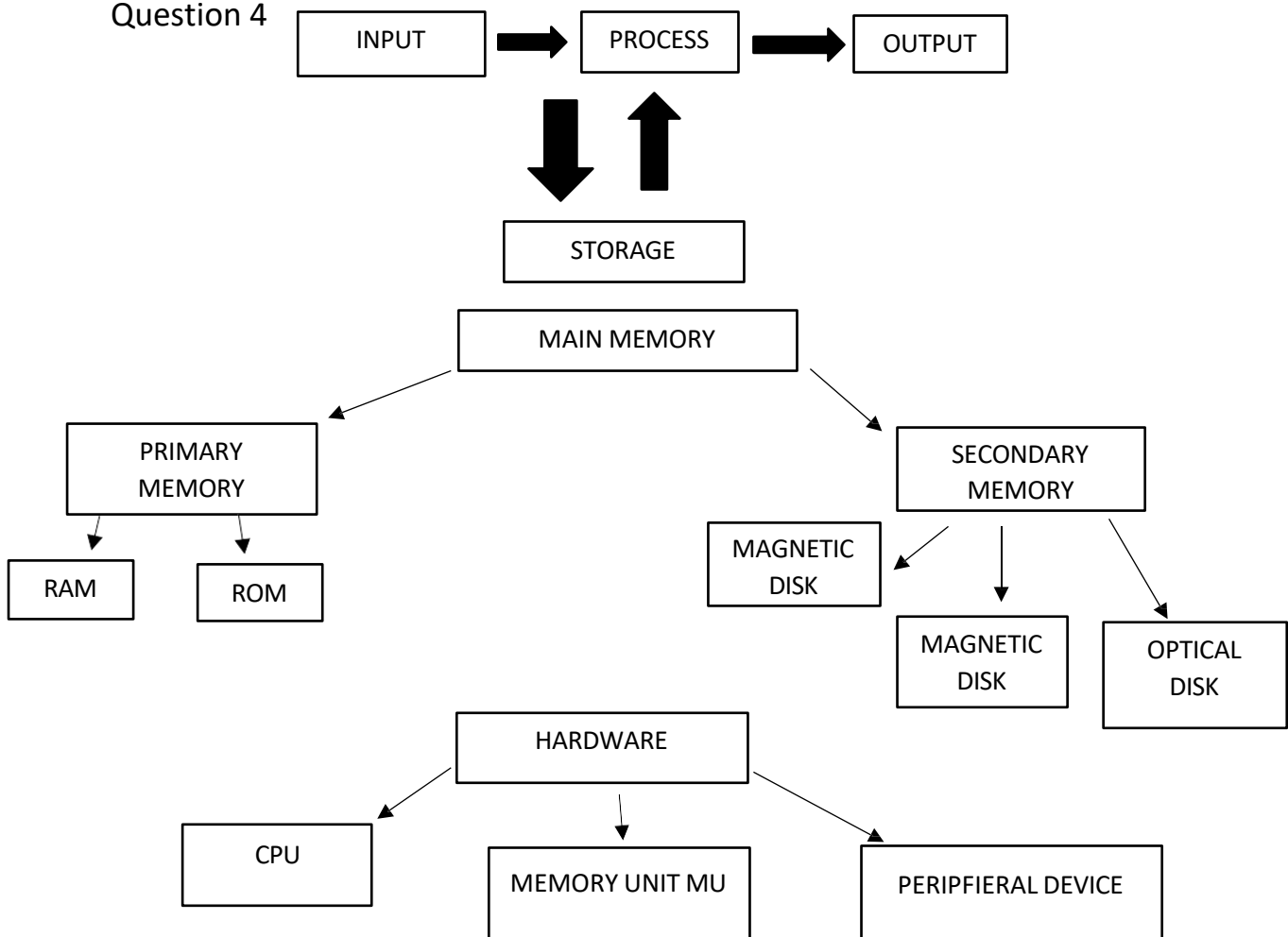
Question 2 Who is the father of computer?

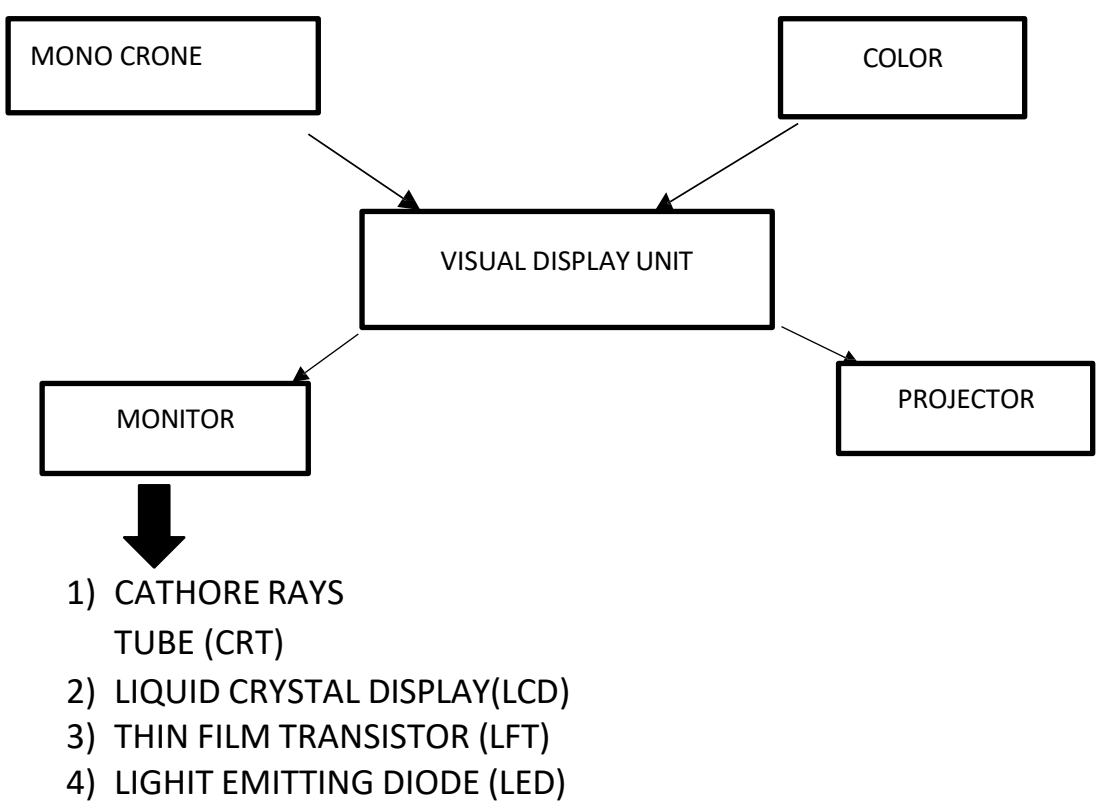
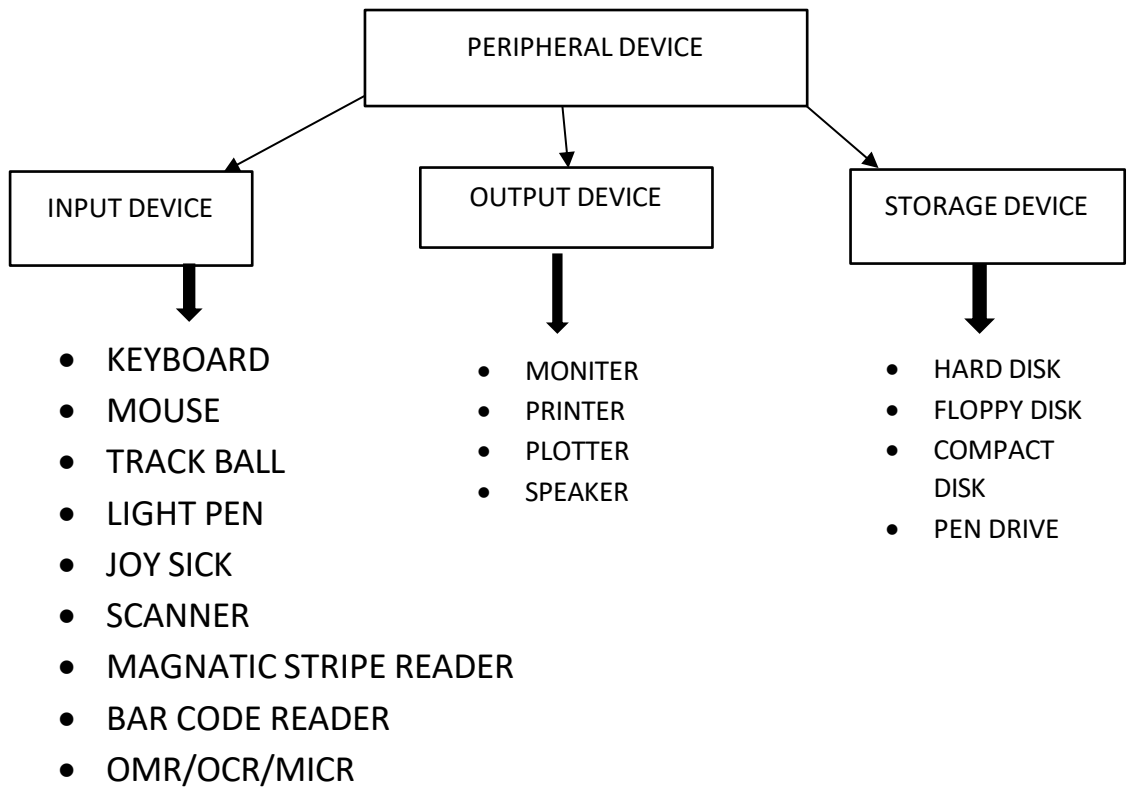
Answer Charles Babbage.

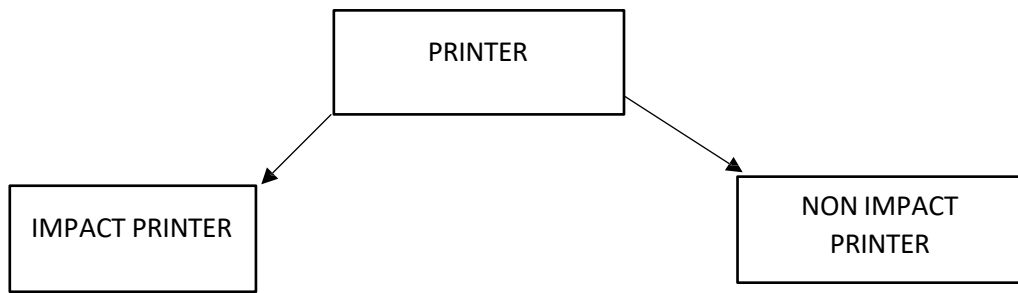
Question 3 Full form of Computer?

Answer (C) = Commonly , (O) = Operating  
(M) = Machine , (P) = particularly  
(U) = used , (T) = Trade  
(E) = Education , (R) = Research

Question 4

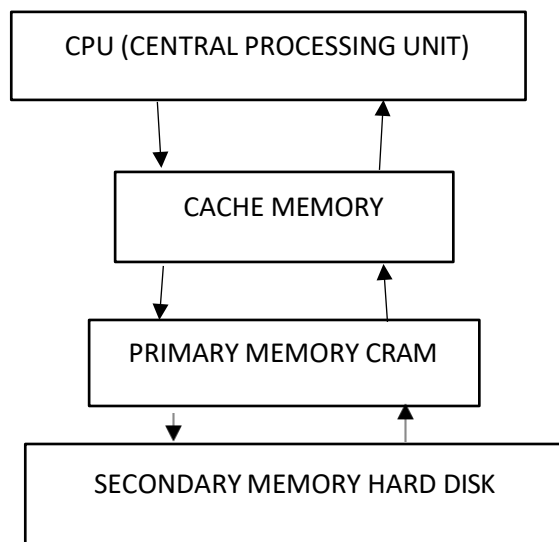
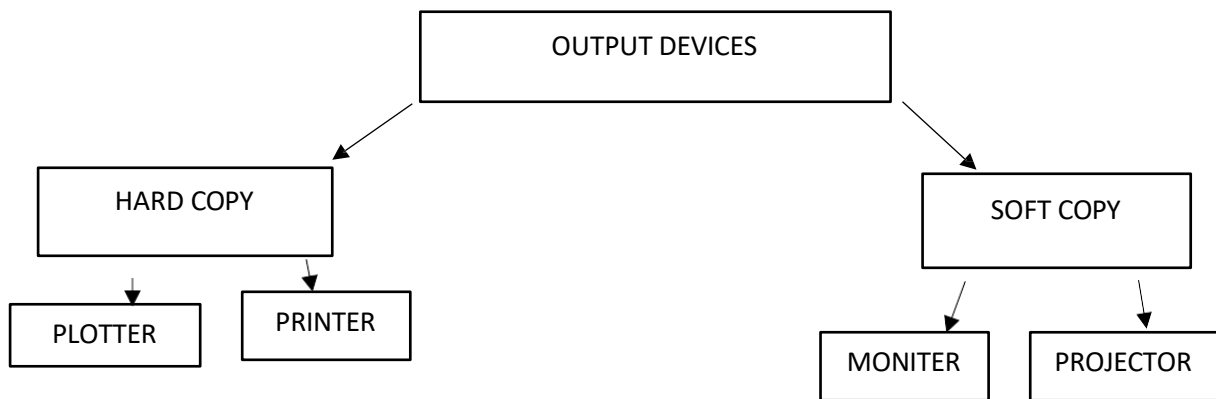






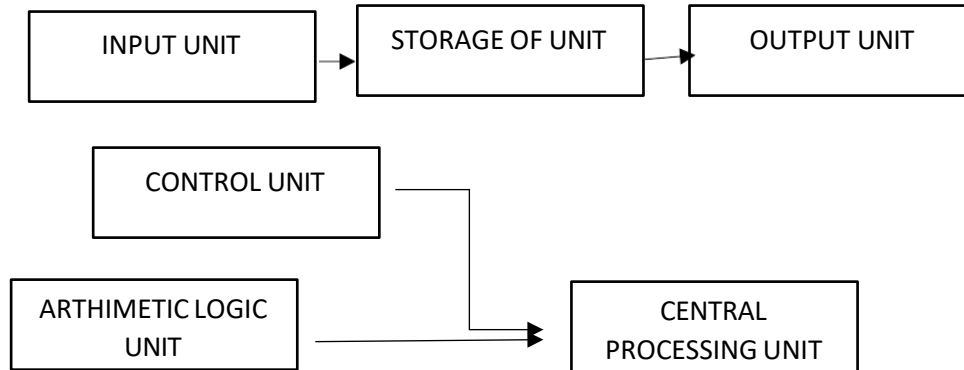
- DOT MATRIX
- DAISY WHEEL
- CHAIN PRINTER
- DRUM PRINTER
- BELT

- THERMAL
- INKJET
- LASER



# ***BASIC COMPUTER OPERATIONS***

## PROGRAMS AND DATA



1<sup>ST</sup> GENERATION (1940-1958) – Vacuum Tubes

2<sup>nd</sup> Generation (1959-1964) – Transistors

3<sup>rd</sup> Generation (1965-1970) – IC (integrated circuits)

4<sup>th</sup> Generation (1971-present)-

(LSI) – Large scale integration

(VLSI) – Very large integration

(ULSI) – Ultra large scale integration

5<sup>th</sup> Generation (Today) – Still under development phase.