ST. PAUL'S ACADEMY COMPUTER

CLASS-VII

Chapter 1: Fundamental & History of Computer

- 1. Answer the following questions:
- a. What is a computer? List the areas where it is used.
- b. How does a computer work?
- c. How does a computer used in hospital?
- d. How does a computer used in transportation?
- e. What is ABACUS? Is it still used in the calculation?
- f. Who and when Napier's Bone was invented?

- g. Who invented the first analog device and when?
- h. Who invented the first mechanical calculator and when?
- i. Who is known as the father of Computer?
- j. List the inventions of Charles Babbage.
- k. Who was Lady Augusta Ada Lovelace?
- I. Who invented Tabulating Machine?

Ans (a): A computer is a programmable electronic device. It accepts data and instruction as input from the user, process the data according to instructions then produce the information or output.

Computer is used in different areas: Education, Hospital and medical sector, Bank, Office, Home and Transportation.

Ans (b): A computer works on the principle of Input, Process and Output (IPO).

<u>Input:</u> The data or instruction fed to the computer is known as Input. The commonly used input devices are keyboard and mouse. <u>Process/ Processing:</u> The process of treating data according to the instruction is known as Processing. The CPU of computer treats data.

Output: The information produced by the computer is known as Output. The commonly used output devices are monitor and printer.

Ans (c): A computer is used in hospital:

- To keep the medical records of the patients
- Doing a number of medical tests
- Monitoring the critical patient's blood pressure, heart rate, pulse rate, brain reading

Ans (d): A computer is used in transportation:

- for controlling fuel consumption and safety
- to control traffic lights, metro trains and bullet trains
- to manage and control landing and takeoff the airplanes.

Ans (e): The ABACUS was the first calculating device. It was the first calculating device. It was made up of wooden frame having two parts upper deck and lower deck separated by middle bar. It contains two movable beads in the upper deck and five movable beads in the lower deck.

Yes, It is still used in the calculation.

Ans (f): Napier's Bone was invented by John Napier in 1617 AD.

Ans (g): The first analog device was invented by William Oughtred in 1622 AD.

Ans (h): The first mechanical calculator was invented by Blaise Pascal in 1642 AD.

Ans (i): Charles Babbage is known as the father of computer.

Ans (j): List of inventions of Charles Babbage: i. Difference Engine ii. Analytic Engine

Ans (k): Lady Augusta Ada Lovelace was the first programmer.

Ans (I): Tabulating Machine was invented by Herman Hollerith in 1890 AD.

2. Write the full forms of the following:

- a. IPO: Input Process Output
- b. ABS: Antilock Braking System
- c. CPU: Central Processing Unit
- d. ATM: Automated Teller Machine
- e. GPS: Global Positioning System
- f. ASCC : Automatic Sequence Controlled Calculator
- g. ABC: Atanasoff Berry Computer

- h. ENIAC : Electronic Numerical Integrator and Calculator
- i. EDVAC : Electronic Discrete Variable Automatic Computer
- j. EDSAC : Electronic Delay Storage Automatic Calculator
- k. UNIVAC: Universal Automatic Computer

3. State whether the following statements are true or false.

- a. Abacus was the fully automatic calculating device. [F]
- b. Napier's bone was the invention of William Oughtred. [F]
- c. Pascaline was the first analog device. [F]
- d. Charles Babbage had developed models of Analytical Engine and Difference Engine. [T]
- e. Howard Aiken was the founder of IBM. [F]
- f. Mark-I was the first automatic electromechanical computer. [T]
- g. EDSAC was the first stored program computer. [F]
- h. UNIVAC was the first general purpose electronic digital computer for commercial users. [T]
- i. Nepal had used IBM 1401 computer for census of 2028 B.S. [T]

4. Fill in the blanks:

- a. A computer is a programmable electronic device.
- b. Each computer works on the principle of input, process and output.
- c. The process of treating data according to the instructions is Processing.
- d. Each bead of upper deck of Abacus represents five.
- e. Napiers Bone consisted of 11 set of rods.
- f. Slide Rule was the first analog device.
- g. Blaise Pascal had invented Pascaline in 1642 AD.
- h. Charles Babbage had developed models of <u>Difference Engine</u> and <u>Analytic Engine</u>.
- i. The first automatic electromechanical computer was MARK-I.
- j. UNIVAC-I was first general purpose electronic digital computer.
- k. Lady Augusta Ada Lovelace is known as the first programmer of the world.

5. Choose the correct option.

- a. A computer takes data and instructions through..... [i. keyboard]
- b. Computers are used in banks for [i. keeping transactions information]
- c. Each bead in the lower deck represents [i.1]
- d. John Napier invented In 1617 AD. [iv. Napier's Bone]
- e. is known as the father of computer. [iii. Charles Babbage]
- f. The first automatic electromechanical computer was [iv. ASCC]
- g. was the first stored program computer. [iii. EDVAC]

6. Match the following:

a.	GROUP 'A'	GROUP 'B'		

- a. Pascaline

 iii. The first mechanical calculator
- b. Slide Rule → v. The first analog device
- c. ENIAC → ii. The first general purpose computer
 d. ABC → iv. The first electronic digital computer
- e. EDVAC → v. The first analog device

b. GROUP 'A' GROUP 'B'

- a. Difference Engine → iv. Charles Babbage
 b. Slide Rule → iii. William Oughtred
- c. Pascaline → ii. Blaise Pascal
 d. MARK-I → v. Howard Aiken
- e. Tabulating Machine \rightarrow i. Herman Hollerith