## \*\*\*Basic Block Diagram of Computer\*\*\*

There are necessary functions of computer that needs to perform by the computer itself for completing the entire task. Basically, a computer is an electronic machine, used for processing and storing, the data given by the user. There are different types of computers from micro to supercomputers.

A computer completes a given set of desired instructions is called the function of a computer. Initially, when the user provides input to the computer from the input device the input data is stored in the primary memory then later the data is moved to the CPU (Central Processing Unit). When the data is at CPU it does the following tasks-

- 1. It decides the form of data and the action to be taken accordingly.
- 2. Arithmetic and logical operations are executed by ALU.
- 3. When the process has finished the output or processed result is sent to the output devices in the human-readable form.

Taking data and instructions from a user, processing the data as per instructions, and displaying or storing the processed data

Basic Important functions of computer are following:-

- 1. Data Processing
- 2. Data Storage
- 3. Data movement control

## 1. Data Processing:-

Collection, manipulation, and processing collected data for the required use is known as data processing. It is a technique normally performed by a computer; the process includes retrieving, transforming, or classification of information.

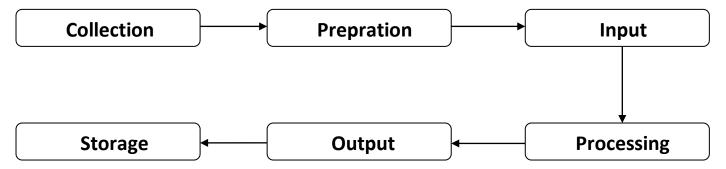
Data in its raw form is not useful to any organization. Data processing is the method of collecting raw data and translating it into usable information. It is usually performed in a step-by-step process by a team of data scientists and data engineers in an organization. The raw data is collected, filtered, sorted, processed, analyzed, stored, and then presented in a readable format.

Data processing is essential for organizations to create better business strategies and increase their competitive edge. By converting the data into readable formats like graphs,

charts, and documents, employees throughout the organization can understand and use the data.

Data is a collection of facts that can include personal data, transaction data, web data, sensor data, and so on. Data processing is conversion of raw data into meaningful information through certain processes.

## **Data Processing Cycle:-**



**Collection:-** The collection of raw data is the first step of the data processing cycle. The type of raw data collected has a huge impact on the output produced. Hence, raw data should be gathered from defined and accurate sources so that the subsequent findings are valid and usable.

**Prepration:-** This step involves removing unwanted data by sorting and filtering the data. This is done to ensure that only the highest quality data is fed into the processing unit.

**Input:-** The collected data is validated and converted into machine-readable form using a keyboard, digitizer, scanner, etc.

**Processing:-** This step transforms the input data in to more meaningful information through the business logic implemented in software programs. Various data processing platforms are available, which have the power to enable faster and more intelligent decisions and to create better customer experiences.

**Output:-** This is the step where processed information is presented to the user in the form of printed reports, video, audio, or on screen. Output must provide meaningful information to guide future decisions of any organization.

**Storage:-** The final step of data processing is to store the data and applications for future use. Depending on the type of data, on use specific Relational Database Management Systems such as Oracle, SQL Server, MySql, etc.

## 2. Data Storage:-