Computer Based Information Systems

An information system collects, processes, stores, analyzes, and dissemi-nates information for a specific purpose. The purpose of information systems has been defined as getting the right information to the right people, at the right time, in the right amount, and in the right format. Because information systems are intended to supply useful information, we need to differentiate between information and two closely related terms: data and knowledge

Data items can be numbers, letters, figures, sounds, and images. Examples of data items are collections of numbers (e.g., 3.11, 2.96, 3.95, 1.99, 2.08) and characters (e.g., B, A, C, A, B, D, F, C).

Information refers to data that have been organized so that they have meaning and value to the recipient. For example, a grade point average (GPA) by itself is data, but a student's name coupled with his or her GPA is information Knowledge consists of data and/or information that have been organized and processed to convey understanding

A computer-based information system, or CBIS, uses computers to collect, process, store, analyze and distribute information for a specific purpose, such as meeting a business objective. The main components of a CBIS include hardware, software, data, procedures and people. Computer Based Information System (CBIS) depends mainly on the computer for handling business application. System analysis develops different types of information system to meet variety of business needs.

There is a class of systems known collectively as computer based information systems. A few of them are as follows:

 i) Transaction Processing System (TPS)
 ii) Management Information System (MIS)
iii) Decision Support System (DSS)
iv) Office Automation Systems (OASs)

Transaction Processing Systems: Transaction processing systems handle routine information items, more often than not manipulating data in some constructive way as it enters or leaves the firm's databases. An order entry program is an example of a TPS. Reasons for TP are recording, classification, sorting, calculation, summarization, storage and exhibit of results.

Management Information Systems: Management Information systems make available a focused vision of information flow as it develops during the course of business activities. This information isconstructive in managing the business. We will discuss all the aspects of MIS in the coming heads in an elaborate manner.

Decision Support Systems: Decision Support systems are methodical models used to progress managerial or professional decision making by bringing significant data to a manager's notice. In many cases, these systems use the identical data as management information systems, but DSS purify the data to make it more functional to managers. It support with exceptional and nonrecurring decisions, which are moderately unstructured. Mainly what factors to reflect on and what information are needed.

Office Automation Systems: Office automation systems endow with electronic mail, word processing, electronic filing, scheduling, calendaring, and other kinds of support to office workers. First introduced with personal computers, these "groupware" applications became essential with the extensive use of personal digital assistants. It combines word processing, telecommunications and data processing to computerize office information, draws on stored data as a result of data processing and

comprise handling of correspondence, reports and documents.

- Below Figure illustrates how these four components interact to form a CBIS.
- • Hardware consists of devices such as the processor, monitor, keyboard, and printer. Together, these devices accept, process, and display data and information.
- • Software is a program or collection of programs that enable the hardware to process data.
- • A database is a collection of related fi les or tables containing data.
  • A network is a connecting system (wireline or wireless) that permits different computers to share resources