NCERT Solutions for Class 11 Accountancy

Financial Accounting Part-2 Chapter 5

Applications of Computers in Accounting

Short answers : Solutions of Questions on Page Number : **490**

Q1 :

State the different elements of a computer system.

Answer :

A computer system is mainly composed of the following six elements.

1. Hardware- It includes all the physical components of a computer such as, keyboard, mouse, monitor, processor, etc. These can be touched and a user inputs commands through them.

2. Software- It is referred to a set of the programs that enables a computer to perform its tasks or commands given by the user. There are following six types of software.

a. Operating System

b. Utility Programs

c. Application Software

d. Language Processors

e. System Software

f. Connectivity Software

3. People- It constitutes the most important part of a computer system. It basically refers to the individuals or the users who interact with the computer through the use of hardware and software. The following are the people who are involved in a computer system.

a. System Analysts

b. Operators

c. Programmers

4. Procedures- A series of operations that are executed in a certain manner in order to achieve a desired set of results is known as 'Procedures'. There are mainly following three types of procedures.

a. Hardware-oriented Procedures

b. Software-oriented Procedures

c. Internal Procedures

5. Data- The facts that are gathered and entered into a computer system is known as 'Data'. It may comprise of numbers, text, graphics, etc.

6. Connectivity- This refers to the manner, in which a computer system is connected to the other electronic devices through telephone lines, microwave transmission, satellite link, etc., is known as 'Connectivity'.

Q2 :

List the distinctive advantages of a computer system over a manual system.

Answer :

The following are some of the distinctive advantages of a computer system over a manual system.

a. High speed

b. Accuracy

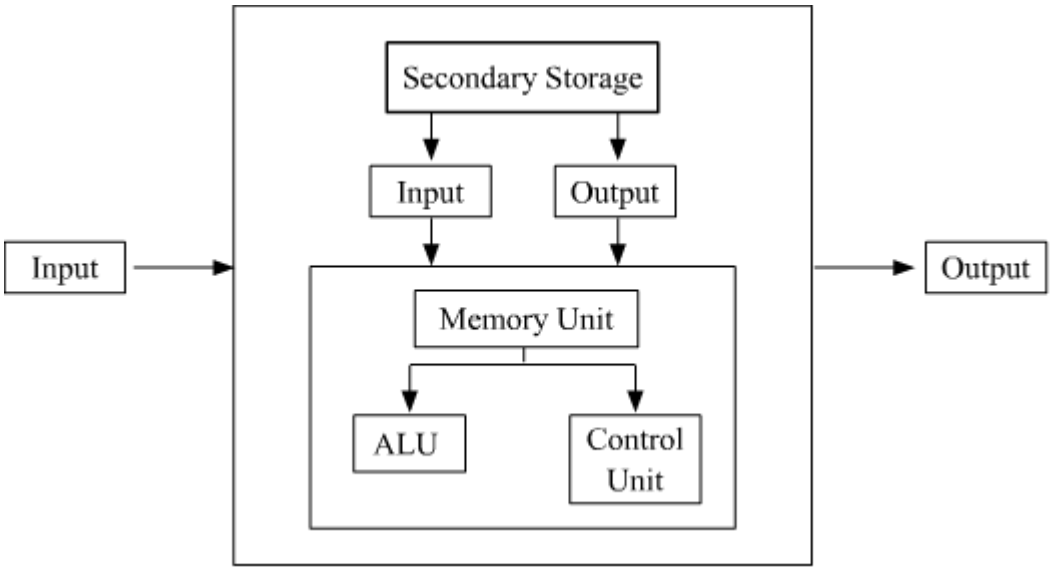
c. Reliability

d. Versatility

e. Storage

Q3 :
Draw block diagram showing the main components of a computer.

Answer :



Q4 :
Give three examples of a Transaction Processing System.

Answer :

Transaction Processing System (TPS) refers to a computerised system that records, processes, validates and stores routine transactions that occur in various functional areas of a business on daily basis. Some of the examples of Transaction Processing System are enlisted as:

1. Automatic Teller Machine (ATMs)- These are those machines that handle the bank transactions through the use of specialised computer programs.

2. Payroll Applications- These are the applications that help to execute payroll programs using terminal and online processing. These are commonly used for preparing payroll or salary of the employees.

3. Order Processing- With the help of TPS applications, orders are collected from clients either manually or through mails and telephonic calls. Thereafter, these orders are processed to initiate invoicing, account receivables and inventory control processing. These are now-a-days widely used in almost every spheres of business, such as online purchasing of tickets, online booking, etc.

Q5 :
State the relationship between Information and Decision.

Answer :

An organisation consists of various interdependent decision making units at every level of management and department. All these separate departments take decisions for their respective fields to achieve the desired common organisational objectives. The organisation as a whole needs to set its targets, draft plans and formulate various policies. These activities are based on the information (in form of data) regarding the past experiences and expected future conditions. It is on the basis of this information that an organisation allocates its resources and attempts to accomplish its determined targets. Thus, it can be said that on one hand, information facilitates the decision making process while on the other hand, decisions took in the past acts as a pool of information in the future.

Q6 :
What is Accounting Information System?

Answer :

An Accounting Information System (AIS) is a system that identifies, collects, processes, summarises, generates and presents information about a business organisation to a wide variety of users. It provides relevant information by processing voluminous accounting data, which is beyond the human capabilities. It provides a glimpse of various organisational activities and maintains a detailed financial record. It acts as a common pool of information from which different departments such as, production department, sales and marketing department, HR department, etc. can fetch useful and relevant information. The information thus provided, helps the users to take their decisions rationally and accordingly formulate their plans and policies. Thus, it can be said that an efficient AIS enhances the effectiveness and efficacy of an organisation as a whole.

The below mentioned points highlight the important characteristics of AIS.

1. It helps in handling the huge volume of accounting and financial transactions of an organisation.

2. It helps in drafting future plans and accordingly setting the future objectives.

3. It acts as a common pool for providing information to different departments besides accounts and finance departments.

4. It helps in maintaining the accounting information as per the guidelines laid down by the Law.

5. It helps in meeting the informational needs by generating reports for both external accounting users (investors, creditors, etc.) as well as for the internal accounting users (management, shareholders, etc.).

Q7 :
State the various essential features of an accounting report.

Answer :

The following are the various features of an accounting report.

a. Relevance

b. Accuracy

c. Timeliness

d. Conciseness

e. Completeness

Q8 :
Name three components of a Transaction Processing System.

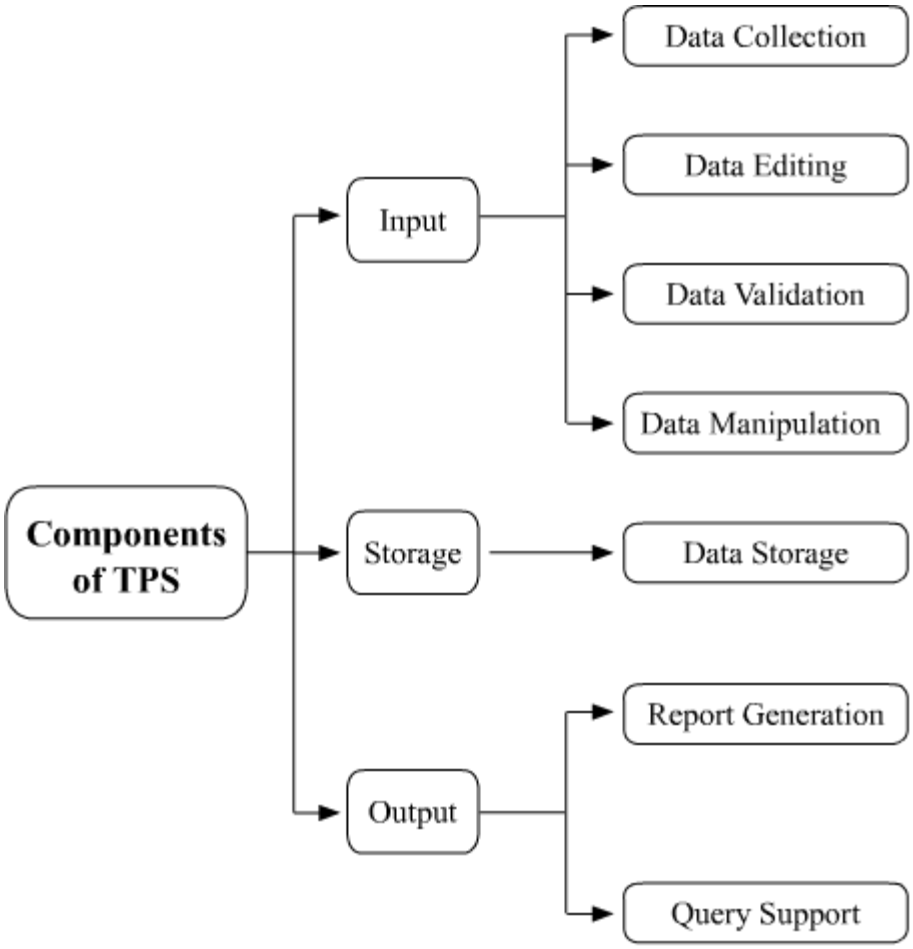
Answer :

The following are three main components of a Transaction Processing System (TPS).

1. Input- A computerised accounting system accepts the complete transaction data as input through the process of data collection, data editing, data validation and data manipulation.

2. Storage- The system stores the inputted data in computer storage media such as hard disk.

3. Output- The stored data, through the process of report generation and query support can be retrieved and processed as and when required for generating an accounting report as output.



Q9 :
Give example of the relationship between a Human Resource Information System and MIS.

Answer :

Management Information System (MIS) is a planned system of collecting, processing, storing and disseminating the data in the form of information to perform the task of decision making and management of an organisation.

Human Resource Information System (HRIS) maintains the records of the employees and prepares salaries and wages payable to them.

Relationship between MIS and HRIS

HRIS provides MIS with the information such as, the qualifications, skills, experiences and past performances of an individual employee. The MIS in turn uses this information to take appropriate decisions. This helps in placing the right person with right qualities at right job positions. This also helps in making decisions regarding promotions and increments of the employees.

Long answers : Solutions of Questions on Page Number : **490**

Q1 :

'An organisation is a collection of interdependent decision-making units that exists to pursue organisational objectives. In the light of this statement, explain the relationship between information and decisions. Also explain the role of Transaction Processing System in facilitating the decision-making process in business organisations.

Answer :

An organisation consists of various interdependent decision making units at every level of management and department. All these separate departments take decisions for their respective fields to achieve the desired common organisational objectives. The organisation as a whole needs to set its targets, draft plans and formulate various policies. These activities are based on the information (in form of data) regarding the past experiences and expected future conditions. It is on the basis of this information that an organisation allocates its resources and attempts to accomplish its determined targets. Thus, it can be said that on one hand, information facilitates the decision making process while on the other hand, decisions took in the past acts as a pool of information in the future

In this aspect, information forms the most crucial part of today's business environment. In this context, Transaction Processing System (TPS) has emerged as crucial component of the business operations. Transaction Processing System (TPS) refers to a computerised system that records, processes, validates and stores routine transactions that occur in various functional areas of a business on daily basis. This system facilitates the decision making in a business organisation through the following processes.

1. Data Collection- The TPS collects all the required data to complete one or more transactions. The data can be collected either manually or through other devices such as scanners and point of sale equipments.

2. Data Editing- The system checks the data for its accuracy, correctness and completeness.

3. Data Validation- It refers to a process, where TPS verifies the data for its correctness and rectifies the errors, if detected.

4. Data Manipulation- TPS performs the process of calculation, then processes and analyses the inputted data on a pre-set design.

5. Data Storage- It places or stores the data in one or more database.

6. Output Generation- TPS helps in creating and generating reports and also presents the reports generated in a pre-designed format either as hardcopy or softcopy.

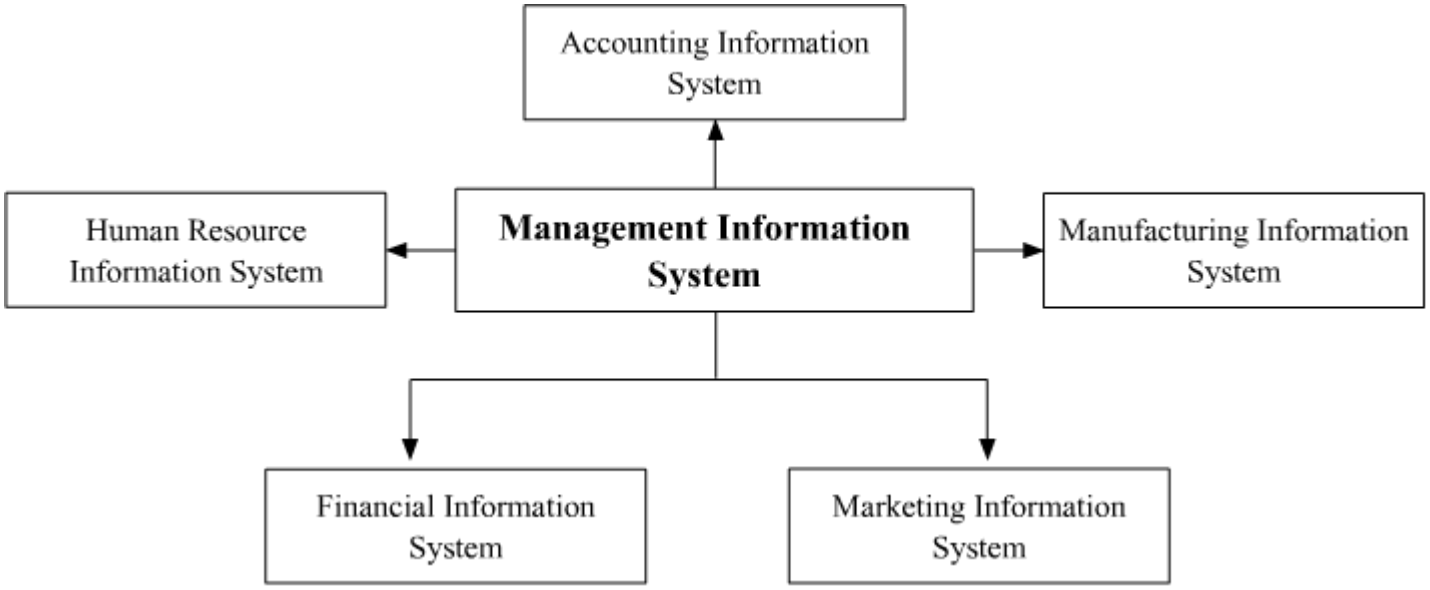
7. Query Support- TPS provides a mechanism enabling its users to raise a query upon the stored data and extract the required information in required format as and when the need arises.

Q2 :

Explain, using examples, the relationship between the organisational MIS and the other functional information system in an organisation. Describe how AIS receives and provides information to other functional MIS.

Answer :

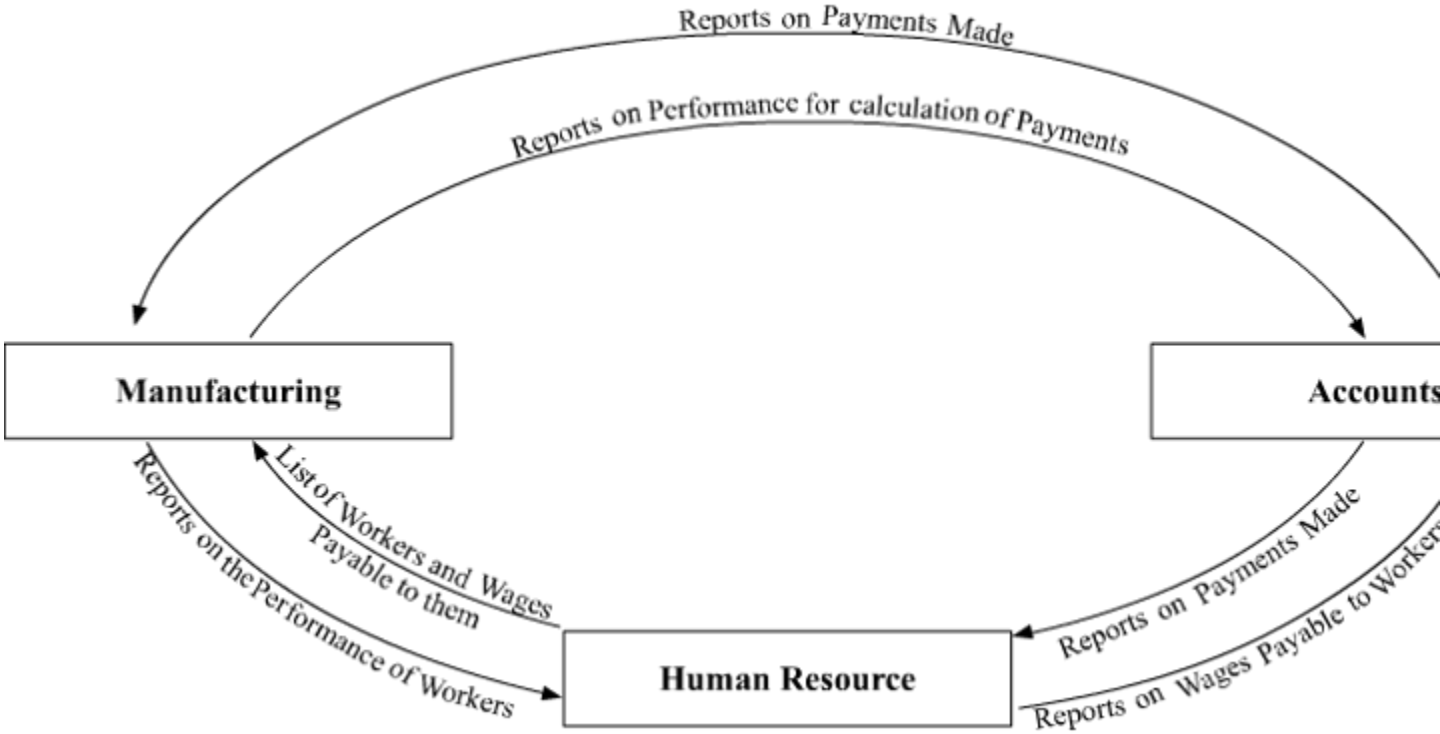
MIS is a planned system of collecting, processing, storing and disseminating the data in the form of information to perform the task of decision making and management of an organisation. An organisation basically operates in an environment, which is surrounded by its suppliers and customers. The informational needs of the organisation emerge from the business processes stratified into its various functional areas. Thus, in this sense, MIS has functional relationship with other functional management information system namely Manufacturing Information System, Human Resource Information System, Accounting Information System and Marketing Information System. MIS receives information from these other functional information systems and uses the received information to take appropriate decisions.



An Accounting Information System (AIS) is a system that identifies, collects, processes, summarises, generates and presents information about a business organisation to a wide variety of users. It is an important component of MIS. It receives and provides information to the various sub-systems of the MIS.

Relationship between AIS, Manufacturing Information System and Human Resource Information System

The Human Resource Department sends a list of workers to the Manufacturing Department. The Manufacturing Department on the basis of this information prepares a report on the performance of each worker and deductions to be made from the wages, if any. Thereafter, this report is send to both Accounts Department as well as to Human Resource Department. After this, the Human Resource Department sends report to the Accounts Department to pay the wages. The Accounts Department with the help of these reports calculates the amount payable and statutory dues and subsequently, makes the final payments to the workers. The report of the final payments is send to the HR Department and the Manufacturing Department by the Accounts Department.



Relationship between AIS and Manufacturing Information System- Business processes in the Manufacturing Department include the following activities.

a) Preparation of Plans and Schedules

b) Issue of Material Requisition Form and Job Cards

c) Issue of Stock and Inventory

d) Issue of Raw Material Procurement Orders

e) Handling Supplier Invoices

f) Payments to Suppliers

The AIS would accordingly include the process of

a) Purchasing Orders

b) Payments to Suppliers

c) Preparing Inventory Status Reports

d) Preparing Reports of Accounts Payable

Relationship between AIS and Marketing Information System- Business processes in the Marketing and Sales Department involve the following activities.

a) Inquiry Process

b) Creation of Contacts

c) Entry of Orders

d) Dispatching Goods

e) Generation of Bills to Customers

The AIS would accordingly include the following activities.

a) Processing of Sales Orders

b) Authorisation of Credit

c) Keeping Custody of the Goods

d) Inventory Status

e) Shipping Details

Q3 :
'An accounting report is essential report which must be able to fulfil certain basic criteria'. Explain? List the various types of accounting reports.

Answer :

When the collected data is processed and manipulated in a useful sense that can be understood by the users without any ambiguity, then it becomes information. When this relevant information is further summarised to meet a particular aim, it is called a report. The content and the design of the report depend upon the level of management to which it is to be submitted. The various decisions are to be made on the basis of this report. Irrespective of the content and design, every accounting report must fulfill the following criteria.

1) Relevance

2) Timeliness

3) Accuracy

4) Completeness

5) Summarisation

The various types of reports used in MIS can be broadly categorised as follows.

1. Summary Reports- These are the reports that summarise all the activities of an organisation. Example, Profit and Loss Account.

2. Demand Reports- These are the reports that are prepared on the request and need of the management.

Example, Bad-Debts report.

3. Customer/Supplier Reports- These are the reports that are prepared as per the specifications of the management showing various aspects of the suppliers/customers.

Example, Report of Top 10 customers.

4. Exception Reports- These are the reports that are prepared in accordance with some specific conditions or exceptions.

Example, Inventory Status Report.

5. Responsibility Reports- These reports are prepared by the managers who are responsible for their respective departments.

Example, Purchase Manager submits a report regarding different aspects of purchase.

Q4 :
Describe the various elements of a computer system and explain the distinctive features of a computer system and manual system.

Answer :

A computer system is ideally composed of the following six elements.

1. Hardware- It includes all the physical components of a computer such as, keyboard, mouse, monitor, processor, etc. These can be touched and a user inputs commands through them.

2. Software- It is referred to a set of the programs that enables a computer to perform its tasks or commands given by the user. There are following six types of software.

a. Operating System- It is an integrated set of specialised programs that are meant to manage and control the resources of a computer. They make the computer user-interactive, i.e. user-friendly. It means that operating system forms an interactive link between the user and the computer hardware.

b. Utility Programs- Utility Programs refer to the set of pre-written computer programs that are designed to perform certain supporting operations. Most of the utility software are highly specialised and are specially designed to perform a single task or a small range of tasks.

c. Application Software- These are user-oriented programs that are designed and developed for performing certain specified tasks.

d. Language Processors- These are the software that interpret or translate a program language into a machine language.

e. System Software- These are the software that controls the internal functions of the system such as reading data from the input devices.

f. Connectivity Software- These are the software that creates and controls the connection between a computer and a server with the purpose of sharing the data.

3. People- It constitutes the most important part of a computer system. It basically refers to the individuals or the users who interact with the computer through the use of hardware and software. The following are the people who are involved in a computer system.

a. System Analyst- They are the people who design the data processing system.

b. Operators- They are the people who write programs to implement the data processing system.

c. Programmers- They are the people who participate in operating the computers.

4. Procedures- A series of operations that are executed in a certain manner in order to achieve a desired set of results is known as 'Procedures'. There are mainly following three types of procedures.

a. Hardware Oriented Procedures- Hardware Oriented Procedures provide details about various components of a computer and their uses.

b. Software Oriented Procedures - Software Oriented Procedures provide detailed set of instructions required for using the software of a computer system.

c. Internal Procedures- These procedures help in sequencing the operation or working of each sub-set of overall computer system.

5. Data- It refers to the facts that are gathered and entered into a computer system. It may comprise of numbers, text, graphics, etc.

6. Connectivity- This refers to the manner, in which a computer system is connected to the other electronic devices through telephone lines, microwave transmission, satellite link, etc., is known as 'Connectivity'.

The mentioned below are some distinctive features of a computer system and a manual system.

1. Accuracy- The computations and operations performed by a computer are highly accurate and correct. If any error is detected it may be due to input of the wrong data or wrong command by the user.

As against this, in manual system the results generated or produced by the human beings are not very accurate due to carelessness, boredom and fatigue.

2. Speed- Computer systems require far less time than the manual systems in performing a task. Modern computers can perform 100 million calculations per second.

3. Reliability- It may be beyond the human capabilities to work continuously for long hours. Often people get tired, lack concentration and may feel mental stress while working out huge volume of data that involves tedious calculations. Computer systems overcome these limitations very easily. A computer can easily perform variety of tasks with great precision and accuracy, thereby making the results highly reliable.

As against this, the reliability of the manual system is little doubtful in case of voluminous data.

4. Versatility- Computers are designed to perform a variety of task and has wide application in various areas such as, business, industry, etc. As against this, in manual systems human beings can perform only a few specialised tasks and thus are lesser versatile.

5. Storage- Computers have a huge storage capacity and can store huge volume of data in a very small physical space. For example a typical main frame computer can store bullions of characters and thousands of graphic images. As against this, the capabilities of manual system are no where close to this.