1. Meaning of computer?

The origin the word computer is taken from latin, meaning " to reckon or to computo" computer is an electronic device which converts raw data into meaningful information. that is the computer is a machine that accepts data as its input, processes it and produces the desired result as output.

Areas of computer applications?

Computers are used in day-to-day life to simplify the producers and practices in the book. Some of the important applications of computers are:-

1. Entertainment

2. Education

3. Inventories

4. Music and Engineering

5. Transport and communication.

6. Banking and accounts.

7. Defense.

8. Hospitals.

Fields such as scientific research, business applications, Industrial applications, Meteorology.

space technology, communication, public utilities. telephone, Medicine, law and order, libraries, Museums and education use computers to a maximum extent payroll preparation

Database is normally developed by a for purpose of preparing pay in firms and organisations pay details such as basic pay, dearness allowance, house rent allowance, city compensanting allowances, medical allowance. leave salary, deduction, income tax providend fund, insurance premium etc are accurately computed and classified the computers

Education:

computers are used to help teaching process in all the subjects in an interesting way computers are extremely useful as a source of teaching and learning Instructions are stored and structured carefully to each specific lessons in schools and colleages. programs are designed to manage the decorning process. To test for particular skill and knowledge and

then' to direct the student to next learning phase. time tables and work allotment records are maintained in computers.

Entertainment:

computers are also used for entertainment by kids. They also provide various types of entertainment to all ages and groups. children njoy games ad various types of self-operating sports and races. Entertainment gives more relief by easing tension and stress

Inventories:

stock maintenance is at present done by computers in an efficient way. Many software systems have emerged for moderized inventory management. Just-in-time manufacturing. online order processing, supply chain management etc are done with the help of computers.

Music and Engineering:

The field of music uses computer to a maximum extent. computers store and set various notes and tunes efficiently

and accurately

Order processing

Supply chain management is at present developing very fast. Computers process orders in an efficient way customers records and their history and analyzed.

Transport and communication

staff duties and work schedules are completely maintained by computers in routine manner. Many traffic control, safety aspects, loading and measurement aspect are also done with the use of computers in airways. Railways and roadways are also using computers. cargo and passenger movements are closely monitored.

Banking and accounts

Final transcations are maintained with the help of computers. Home banking, tele-banking and anywhere banking are made possible only by way of computers.

Defense

Modern computer technology is used by defense in excellent manner computers are

based to toace defense secrets and maintain secret records of weapons.

Insurance

Computers handle the activities in insurance company efficiently. Data relating to premium, billing and claims are carried out efficiently. Actuary analysis, Agency reporting are claim processing are also done with the help of computers.

Hospitals

Most of the medical equipments at present are computer-aided equipments. Patients health status and relevant records are stored in computers for easy reference and retrival. The computers are designed in such a way to inform medical and paramedical staff about the health conditions of the patients.

Libraries and Museums:

Book catalogue, author catalogue and subject catalogue are maintained in computers in libraries. Museums are also using computers for cataloguing and indexing of all exhibits

Scientific Research

Research in the modern days, depends on computers and computer-based analysis computers have the capability of calculating beyond human possibilities. All research and educational institutions are having computers. Research in physics, chemistry, astronomy, genetic and various areas use computers for analytical purpose

Industrial application

Around 70 percent of industries, at present depend on computer-based planning, co-ordination and control. Numerically controlled machine tools and taps control production aspects. Industries such as electricity, Steel, printing, paper and engineering design also use computers. There is proper evaluation of projects, time-saving and reduction in fault rate due to the presence of computers in industries.

Meterology:

Computers do data collection and analysis in meterology field. The render valuable services to this science, especially for fishing, shipping.

air travel, weather, forecast, storm
rescue operations, agriculture and industries
space technology

computers are playing important roles in
space technology. The rapid developments of
space technology are mainly due to developments
in the field of computers and due to speed and
computing efficiency

Communication

computers play a significant role in modern
communication systems. communications in air-
travel, air-traffic control, training of pilots,
reservation, time-table, crew scheduling,
cargo handling etc. are done efficiently
by computers

Public utilities

Records of Governmental and public
services are now being stored and processed
by using computers. information collection and
classification are efficiently done. Computers
carry out routine administrative works
such as preparation and printing of rate,
bills, gas, electricity, telephone bills.

for maintaining and issuing driving licences and for registration of vehicles, public health, social services, judicary and educational areas are using computers for extensive activities.

Telephones :

Telephone exchanges were earlier managed manually. Now they have been modified as computerized exchanges. They handle lot of calls quickly and long distance calls are handled more efficiently and quickly

Medicine :

computers in hospitals are maintaining inventories of drugs, equipments, pay rolls, accounts, time schedules etc scanning and advanced equipments are used with the help of computers for effective diagnosis.

Law and order :

Records in relation to accidents, vehicle owners, wanted criminals, fingerprints, criminal history etc, are maintained by police personnel in computers for easy and quick accessibility forensic science experts also use computers.

INPUT AND OUTPUT DEVICES

Input devices

The input devices are used to feed information to the computer. There are several type of input devices.

1. Keyboard
2. Floppy disk
3. Tape drives
4. punched card devices
5. paper tape reader
6. cassette circuit
7. Magnetic tape
8. MICR, OMR, OCR, BCR
9. visual display unit
10. Light pen
11. Mouse Joystick
12. Touch screen
13. Microphone
14. Compact Disk

punched cards

punched cards are developed by Herman Hollinth in 1889

Its divided into 12 rows and 80 cloumns.

one character represent the one cloumn.

Its speed is slow then compared to cpu

At present cloumn coords also available

Keyboard

keyboard is an important input device
26 alphabet key. Separate Number keys and is
same manner in type of write machine.

There are many special character keys

such as $+$ $.$ $-$ $.$ $\times$ $,$ $\div$ $.$ $/$ $\backslash$ $.$ $]$ $.$ $[$ $\{$ $]$ special keys.

such as Home, End, Insert, Delete, Space
bar, caps look, Tab, page up, down

Paper tape

The paper tape is " 1 win and has 300
metres length" Information are reload in
punched hols.

one rows represent the rows cloumn.

Inserting data is very difficult and takes
more time

Joystick

Joystick is used to provide input to the computer It has long handle can move all directions.

The device has four switches for four directions of movement It is most popular device in video games

Track Ball

It is controlled the cursor movement. The ball is moabed in all directions.

Touch screen

Touch screen registars input when a finger. location of fingers is senered by computers.

Light pen :

It is used to select a displayed menu option It is a pointer device is and is like. a pen which identified the menu option.

computer aided designs and graphies can be easily by lightpen

It is easier to enter data into

computer.

Mouse:

Mouse also a pointer device. Its alternate to the keyboard. It is used for games and graphics.

two or three buttons left, right

Floppy disk:

Floppy disk circular pieere thin plastic on a toriall with 8-inch diamotre. This was introduced by IBM during 1970 its storage device.

OUTPUT DEVICES:

The data fed into a computer are processed as per the instructions given to the computer and provides data into the form of output

1. visual Display unit

2. printers

3. Tapes.

4. plotters

5. speeder synthesizes.

some of the output devices.

1 card punching machine.

2. paper tape punching machine.

3. magnatic tape

4. magnetic disk

5. visual display unit

6. floppy disk

7. Electronic tele type unit

8. Dot Matrix printer.

9. Ink Jet printer.

10. Laser printer

11. Daisy wheel printer.

12. Graph plotter or x-y plotter

13. magnatic Ink character printer.

14. optical printer.