then sent to the computer for processing.

* CHAPTER :- 01

... INTRODUCTION TO COMPUTER TECHNOLOGY ...

2. How banks can benefit from computer?

Ans- Computers are widely used in banks. They are used in banks for record keeping and maintaining accounts of customers. By the ATM facility the customers can draw money through ATM card from any branch of that bank (or another bank) at any time of a day.

2. What is the difference b/w CAD and CAM?

Ans. **CAD**

- CAD stands for computer aided designing / drawing.
- CAD is an important industrial art extensively used in many applications including Automotive ship building, Aerospace Industries, Land and agriculture design.
- It is also used in Animation.

vi) storage type and speed
vii) Bus speed
viii) Cooling and thermal management
ix) Software optimization
x) Instruction set Architecture.

Q1-4 What do you meant by termina
Ans) Mainframe computer is accessed by the user through special type of device is called terminal.

There are two types of terminal:

* Dumb terminal:-
Dumb terminal is an input output devices having no processing and storage capabilities.

* Intelligent terminal:-
It is a type of input/output devices that can perform some sort of calculation. Intelligent terminal is faster than dumb terminal.

input to the computer for further process.

6. Define OCR?

Ans- OCR stand for "Optical character recognition" it consist of scanner and a software. The scanner reads the documents and save it image in the computer. The software convert the image into editable text. OCR is used to read utility bills and price tags". The information on the utility bills and price tags is printed in particular font. The OCR device reads the information & convert it into digital code. The information converted into the digital code is the processed by the computer.

8. Define the working of MICR?

Ans- MICR stands for "Magnetic ink character recognition". The MICR is used to read text printed in magnetizar ink. It is used in banks for cheque processing. MICR character are printed on the lower- kept edge of the cheque. The characters represent the bank number, account number and check number. Each cheque is inserted into in MICR reader which sends ele...

* Display Screen :-

Input/output device

1) size - measure کیا جاتا ہے diagonal کے ذریعے size
2) Colour
3) Resolution

CGA, VGA, XGA

Red, blue, green - ملانے سے باقی رنگ بنائے جاتے ہیں۔

white - جب سارے رنگ reflect ہو جائیں۔

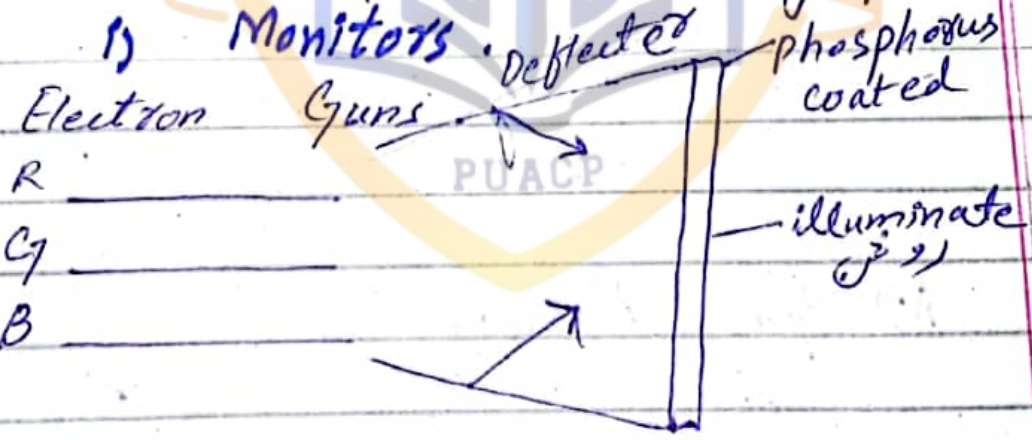
black - جب سارے رنگ absorb ہو جائیں۔

4x3 Picture - جتنے no. of pixels بڑھائے جائیں اچھی ہو جاتی ہے۔

جو بھی display Picture device use pixel جتنے ہوتے ہیں Resolution اتنی ہی اچھی ہوتی ہے۔

VGA video graphic array.
SVGA Super video
XGA extended graphic array

1) Monitors



Electron جہاں پر ٹکراتے تھے وہاں سے screen روشن ہو جاتی تھی۔

single source of light - ہمیشہ راستے پر فاصلہ برقرار رکھنا پڑتا تھا۔

different colour - دوسرے colour بنائے جاتے ہیں mix ←

iii) Sheet-fed Scanner

A sheet-fed scanner is a type of scanner that scans only one piece of paper at a time. The paper is moved automatically through the scanner across a stationary scan head. Sheet-fed scanners can scan photos, letters, forms, business cards, and even receipts. Sheet-fed scanners are available in different shapes and types. Some of them are shown in the following figures.

Figure: Sheet-fed Scanners

3.2 OUTPUT AND OUTPUT DEVICES

Components of System Unit

Q:1 USB hub is used for?

Ans: A device that expands a single USB port into several so that there are most port available to connect devices to the host system. Similar to power strip.

Q:2 Define hot swapping?

Ans: A hot swapping describes "the act of removing components from or plugging them into a computer system while power remains switched on".

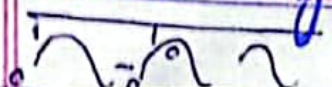
Q:3 Define data access time and how we can determine it?

Ans: In the computer, it is the time interval between the instant at which an instructions control unit initates a call for data or a request to store data and the instant in which the delivery of the data is completed or the storage is started.

Q:10 Which factors effects processing speed of computer?

Ans: i) Processor clock speed ii) Cache size
iii) Number of cores iv) RAM

Electro Magnetic Induction:- [E.M.I]

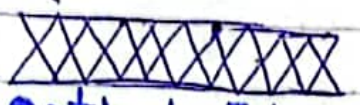
i) 

اس سے آنے والی waves اگر بیٹری کے cable کے اندر آ جائیں تو اس سے add یا sub ہونے سے بیٹری change data ہو سکتا ہے - 0 کو 1 اور 1 کو 0 میں بدل سکتی ہیں -

ii) Coxtal Cable: (one)

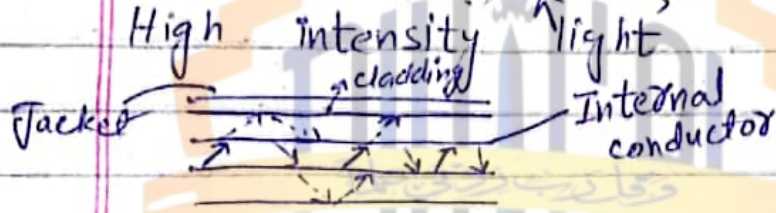
- اس میں ایک conductor ہے جس پر سے data گزرتا ہے - یہ دور تک data نہیں لے جا سکتی ہیں -

EMI

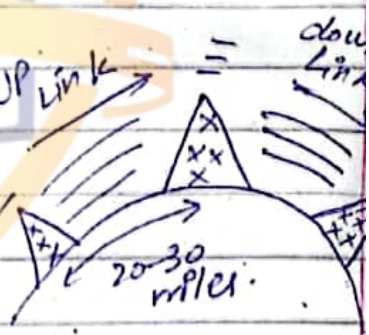


iii) Optical Fiber: (روشنی ریشے)

اسکا conductor انسانی بال سے بھی زیادہ باریک ہے - یہ پلاسٹک یا شیشے کا بنا ہوتا ہے - اس میں روشنی کے ذریعے data بھیجا جائے گا -



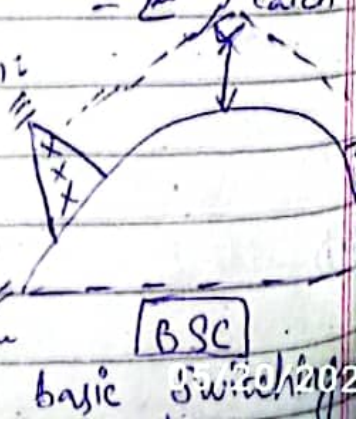
ii) Un-guided Media:



i) Micro wave Communication
Line of sight (L-O-S)

- اس میں V کا اصول استعمال ہوتا ہے
اس میں ایک ٹاور دوسرے ٹاور سے 20-30 miles کے فاصلے پر لگایا جاتا ہے تاکہ یہ ایک ٹاور دوسرے ٹاور کے signal کو catch کر سکے -

ii) Satellite Communication:



اس میں زمین 22300 miles کی بلندی پر satellite نصب کیے جاتے ہیں تاکہ زمین سے حاصل ہونے والے سگنل کو Amplifies کر سکیں -

CHAPTER NO: 02

... INPUT AND OUTPUT DEVICES ...

1. What is facsimile machine and how it works?

Ans: A facsimile machine is a device that is use to send documents electronically over a telephone network. The transmission it send are called facses and these can be b/w a two facs machine or b/w a facs machine and computer or online for service and that is equipped to send and receive faxes.

5. What is barcode and where it is used?

Ans: A barcode is an identification code. It consists of a set of vertical lines and spaces of different widths. It is on a product or on a label. It consist all information about the product. There are several bar-coding systems in use. The most important commonly used bar code is universal product code (UPC). Barcode is read by a barcode reader. The barcode reader uses a laser beam to scan the code. The barcode reader scane code and translates it into digital code. The digital code

05/23/2024 12:10

1945 to 1956

* Thousands of vacuum tubes.
* Consumed lots of power.
* Generated large amount of heat.
* Large in size.
* Very expensive
* Used Machine language.
* Punched cards & Paper Tapes
* Fastest calculating Device.
* 5000 Additions/sec.
* 350 Multiplication/sec.

E.g. ENIAC
EDVAC
UNIVAC-I

2nd Generation of Computer

1956 to 1963

* Used Transistors
* Smaller & Faster than 1st generation.
* Cheaper and more reliable.
* More energy efficient.
* Still generated lots of heat.
* Used Magnetic core technology.
* Saved instruction in memory.
* Used machine / Assembly language

e.g.
IBM 7090
CDC 3600

3rd Generation of Computer

1964 to 1971

* Used integrated circuits (IC)
* Smaller and Faster.
* Cheaper than 2nd generation.
* Accessed using keyboard, Monitor
* Used operating System.

* Made available to large number of ~~Paper~~. people.

e.g.
IBM 360
PDP 11.

4th Generation of Computer.

1971 to now.

* Microprocessors with VLSI (very large scale Integration).
* Thousands of IC on a single
* Small and portable.
* Cheapest and work at high speed.
* Accuracy and Reliability.
* Larger memory.
* GUI and application software.
* Hand held devices.

e.g.
All computer . . .

(Future) 5th Generation of Comp

* ULSI (Ultra large scale integration)
* Faster, cheaper.
* Self reliant
* Quantum technology.
* Nano technology.
* Intelligent Computers.