colour buffer

Eg)- 640 x 480

X- coordinates = 10 bits
Y- coordinate = 9 bits
19 bits for pixel position.

In Black & white moniter = 1 bit.
Colour moniter = 4 bits, 5 bits,

23 bits per pixel; 24 bits per pixel.

Size of frame buffer

$$23 \times 640 \times 480 = \qquad bits = \qquad /8 \; bytes$$

Depth

The no. of bits per pixel in fram buffer is called as depth.

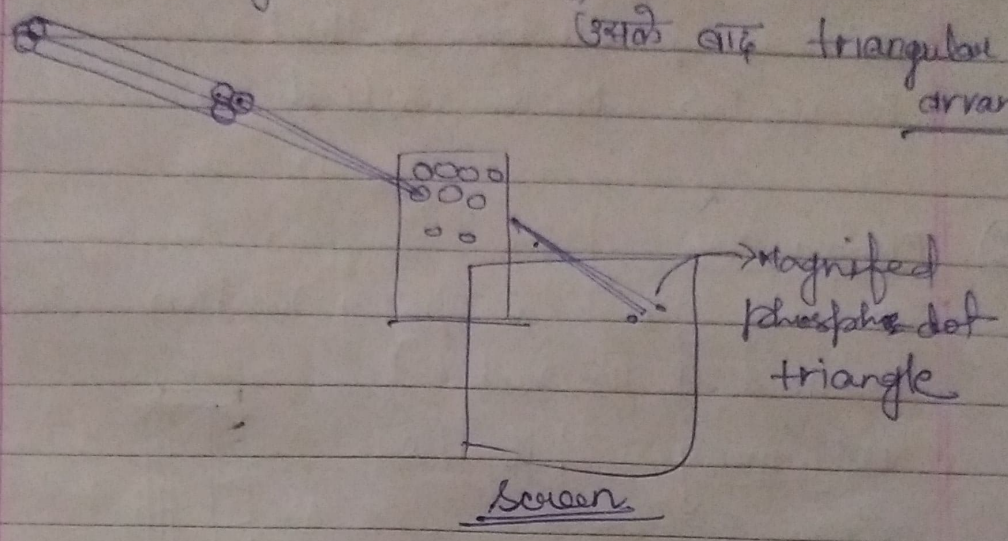Bitmap :- A frame buffer with a bit per pixel for colour is called as bitmap.

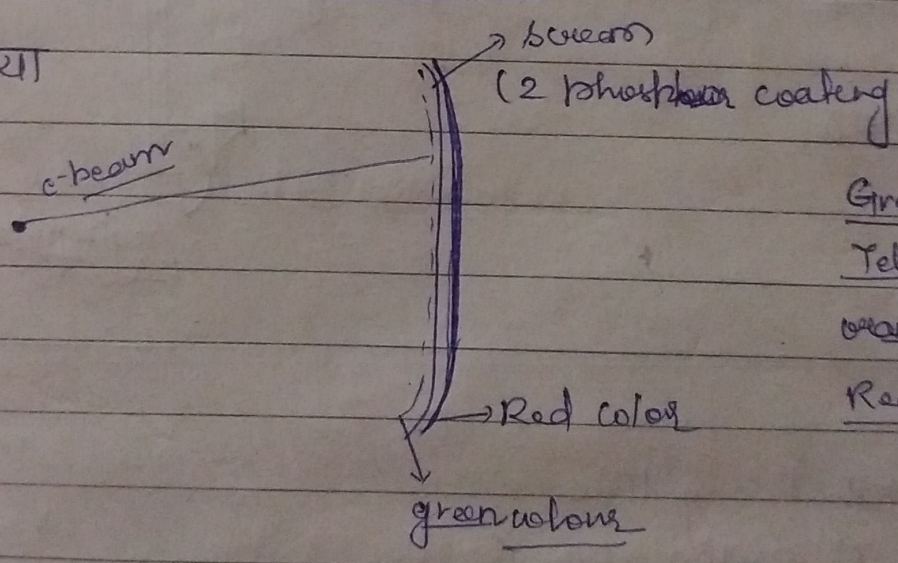Pixmap - A frame buffer with multiple bits per pixel for colour is called as pixmap;

Computer Graphics Hardware,   Saurabh kumar

Shadow - Mask method

→ 3 election guns.

उसके बाद line arrangement

उसके बाद triangular
                arrangement

→ Magnified
  phosphor dot
  triangle

Screen

☆ Beam penetration method

पहले आया

→ screen
(2 phosphor coating

c-beam

→ Red color

green colour

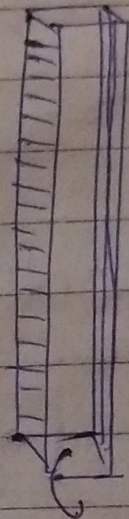| Green | depend |
Yellow	upon
orange	the
Red	intensity

Green- only green
Yellow == more green + less Red
orange = Less green + more red
Red < only red

① Colour CRT Method
  1. Beam penetration method
  2. Shadow - Mask method .

② Plasma TV
  crossing point a pixel location
  (vertical & horizontal)
  Helium gas fill b/w

③ LCD (Liquid display)

④ LED

negligible

① Cathod ray tube
  ⌐ RASTER Scan display
  └→ RANDOM Scan display

② Colour CRT Monitor
  ⌐ Beam penetration method
  └→ Shadow - Mask method
      ⌐ line arrangement of electron gun
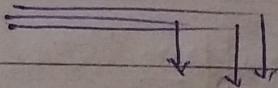   └→ triangular arrangement of electron gun

③ Plasma technology — TV

④ LCD — Monitor, TV ⟶ Non emissive

③ LED — Monitor, TV

A time of CRT Method (Laptop screen) में क्या ?

⟶ Laptop cathod ray tube Monitor both are parallel.

Flat panel devices —

Emissive :- take of electrial enregy & convert it into Graphics pattern.

Non - emissive = take light & convert into graphical pattern

CRT parallel (written vertically in left margin)

INPUT DEVICES

1. keyboard - text, numerical values special character, predefined character, do more cursor

2. Button Box - A set of buttons & switches to input pre defined function

3. Dials - To enter scalar values.
A potentiometer is used to measure dial rotation, which is converted into corresponding numerical value.

4. Mouse :- A hand held device used for positioning the cursor.
Mouse is with wheel or roller on button.

Optical Mouse :-
optical Mouse with sensors (No balls)
Grid pad
Cordless Mouse :- Communicating with processor using digital radio technology.
· Buttons at the top of mouse
· in to invoke different function to position the cursor.
· Mouse buttons are programmable

Z-Mouse - Three buttons and track ball on it.

5. <u>track ball</u>:- A Handheld ball A
   potentiometer measures movement of
   cursor on <u>screen</u>