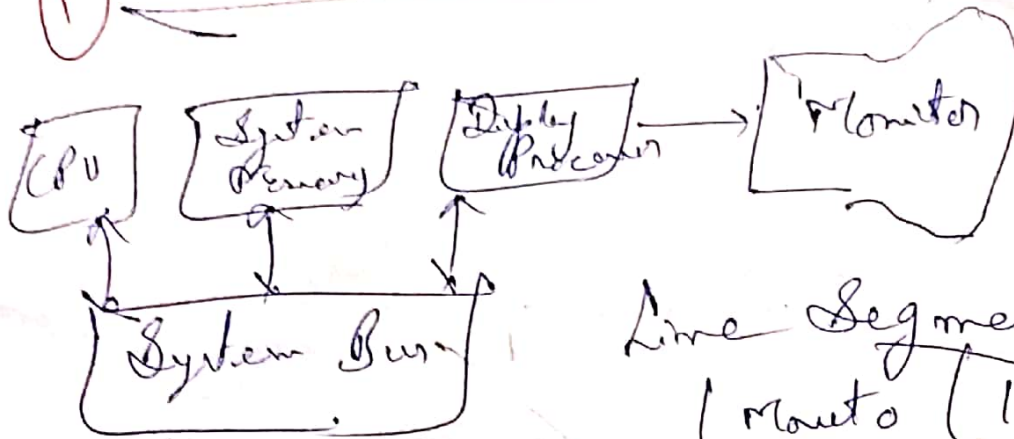


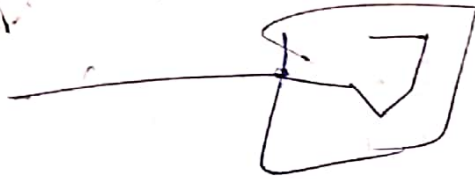
# Random Scan Display (vector, Stroke writing, Calligraphic Display)

①



Frame Rate  
30 Hz  
Time to draw  
one frame =  $\frac{1}{30} \text{ sec}$   
 $= 33.33 \text{ ms}$

Line Segments  
(Point (10, 30))



Pen plotter

(30 to 60 times / second)  
(Refresh Rate)

High Resolution  
Easy Animation  
Little memory

Drawal -  
Req. Intelligent Electron beam (Procedural Controlled)  
limited / Screen Daintly  
Color Capability

DNS P (Direct view Storage Tube)

Phosphor Screen



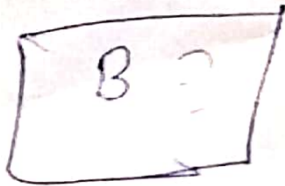
Do not  
Overlap

Intensity  $\frac{1}{10}$

Aspect Ratio:  $\frac{\text{Vertical Points}}{\text{Horizontal Points}}$

$\frac{3}{4}$

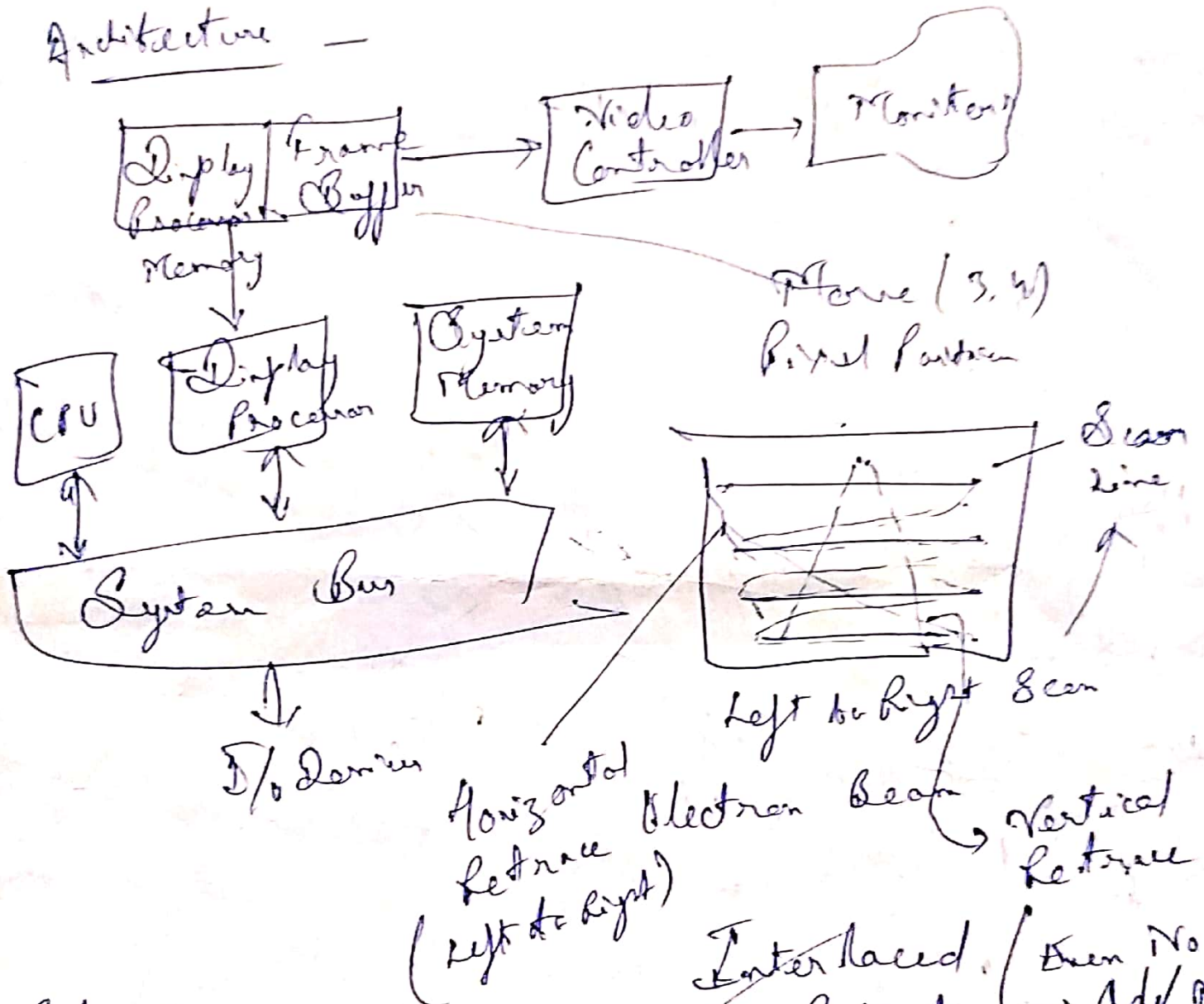
# CRT - Raster Scan



Pixel Buffer

(1)

## Architecture



## Bitmap

(Monochrome System)

2 bits 0 or 1 ON or OFF

## Color Monitor (Pix maps)

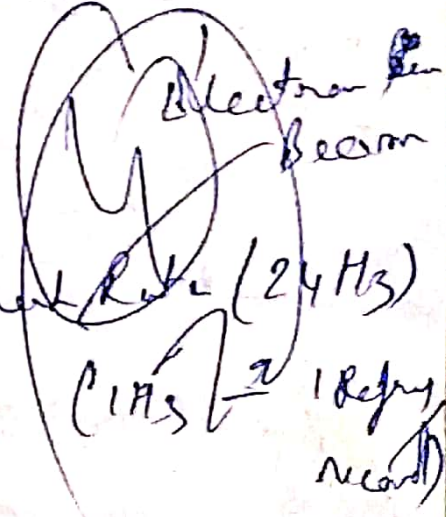
Color Intensity  $\rightarrow$  Color Buffer (24 bits)

Depth of buffer area in no. of bits/pixel (upto 24)

TV, printer, PC monitor

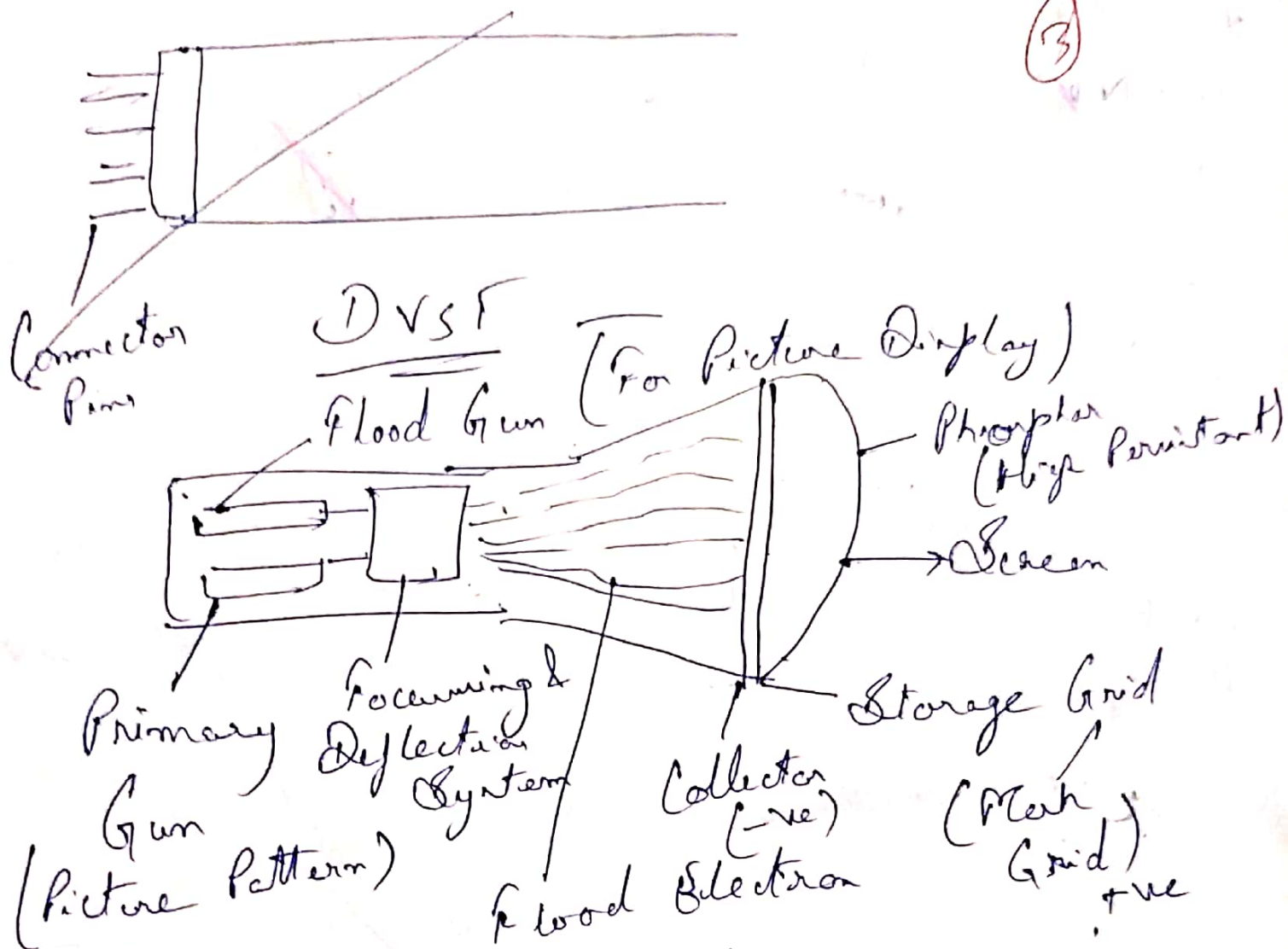
Interlaced Refresh (Even No.  $\rightarrow$  Odd No.)

Refresh Rate (24 Hz)



CRF —

(3)



No Refresh required —

Complex Picture  
Particular Part cannot be removed

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