# VIDEO DISPLAY UNIT (VDU)

## Introduction

- A monitor or display (sometimes called a visual display unit) is an electronic visual display for computers.

- The first computer monitors used Cathode Ray Tube (CRT), which was the dominant technology until they were replaced by LCD monitors in the 21st Century.

# Cathode Ray Tube (CRT) Monitor

- CRT is used.
- Beam penetrates on phosphor coated screen.
- Picture is drawn as per the intensity of light.
- Electron beam is taken back over same points to make picture glowing.
- This CRT is called Refresh CRT.

# Raster Scan Display

- A Raster Scan is the rectangular pattern of image capture and reconstruction.

- Horizontal deflection component of electron beam causes magnetic field to make beam scan forward from left to right at constant rate for each of 3 colors.

# Random Scan Display

- Random-scan displays draw a picture one line at a time and are also called vector displays.

- Random-scan displays are designed to draw all the component lines of a picture 30 to 60 times each second.

- Each refresh cycle is delayed to avoid refresh rates greater than 60 frames per second. Otherwise, faster refreshing of the set of lines could burn out the phosphor.

# Flat Panel Display

- Flat panel display encompass a growing number of electronic visual display technologies enabling much lighter and thinner usually 100 mm.
- It is used in many applications, specifically modern portable devices such as
  - Laptops
  - Cellular Phones
  - Digital Cameras
  - Camcorders
  - Compact Cameras
  - Pocket Video Camera.

# Flat Panel Display