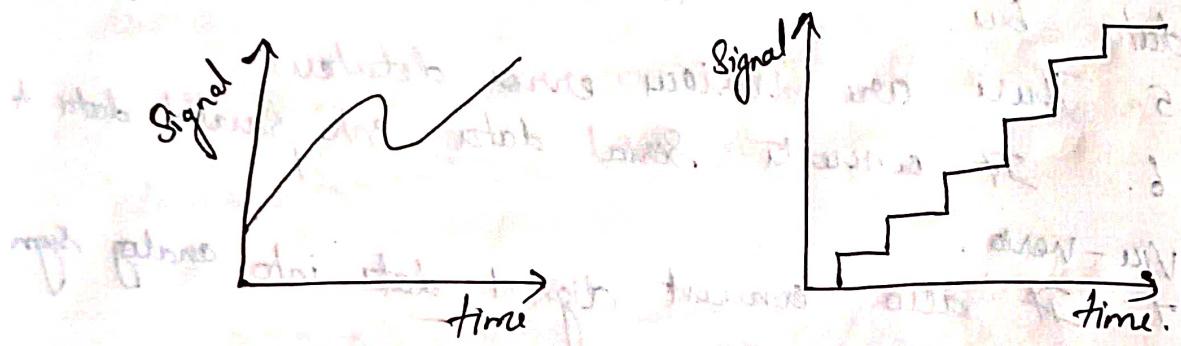


## Analog and Discrete Signals.

Analog and digital signals are the types of signals carrying information. The major difference b/w both signals is that the analog signals have continuous electrical signals, while digital signal have non-continuous electrical signal.



### Analog signals:

These signals are continuous in both value and time.

### Discrete signals:

These signals are discrete in value and time.

## Analog signals

- \* Analog signals is continuous and time varying.
- \* Troubleshooting of analog signals are difficult.
- \* An analog signal is usually in the form of sine wave.
- \* Easily affected by the noise.
- \* uses continuous values to represent the data.
- \* may be effected during data transmission.
- \* use more power.

## Digital signals

- \* Have two or more states signals for binary form.
- \* Troubleshooting of digital signals are easy.
- \* An digital signal is usually in form of square wave.
- \* There are stable and less prone to noise.
- \* Digital signals are discrete value to represent data.
- \* not effected during data transmission.
- \* Digital signal use less power.

## Information obtained from an analog signal:

1. Magnitude. (or amplitude)
2. Frequency
3. Phase.

## Key terms:

- \* Duty cycle
- \* Frequency content.
- \* Rise time.
- \* Fall time.
- \* Analog Signal Modulation.
- \* Noise level.