

# Bit rate and Baud rate

- ▶ **Bit rate** is a measure of the number of data bits (that's 0's and 1's) transmitted in **one second**.
- ▶ *Baud rate (signal unit/sec: baud / sec: baud)*
  - ▶ the number of **signal units** per **second**
  - ▶ less than or equal to the bit rate

# Example:1

An analog signal carries 4 bits in each signal unit. If 1000 signal units are sent per second, find the baud rate and the bit rate

Sol:

- ▶ Baud rate = 1000 bauds per second (baud/s)
- ▶ Bit rate =  $1000 \times 4 = 4000$  bps

## Example:2

The bit rate of a signal is 3000. If each signal unit carries 6 bits, what is the baud rate?

Sol:

$$\text{Baud rate} = 3000 / 6 = 500 \text{ baud/s}$$

END..