

REC

Infinite impulse response filter- IIR

Finite impulse response filter- FIR

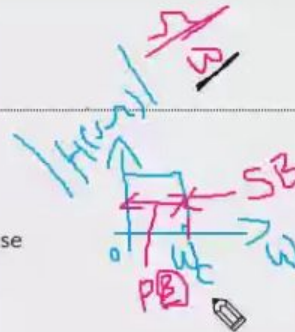
Main Requirement of any filter is it should possess a linear phase

Filter- Frequency selective network

IIR — Infinite Impulse Response

$$y(n) = x(n) * h(n)$$

$$Y(j\omega) = X(\omega) \cdot H(\omega)$$



You



REC

Calibri (Body)

11

A⁺ A⁻B⁺ B⁻I⁺ I⁻U⁺ U⁻A⁺ A⁻

ab

A⁺ A⁻

Format Painter

Clipboard

Font

Paragraph

AaBbCcDd

Normal

AaBbCcDd

No Spaci...

AaBbCc

Heading 1

AaBbCc

Heading 2

AaB

Title

AaBbCc

Subtitle

AaBbCcDd

Subtle Em...

AaBbCcDd

Emphasis

Styles

Ch

Sty

Find
Replace
Select
Editing

Infinite impulse response filter- IIR

Finite impulse response filter- FIR

Main Requirement of any filter is it should possess a linear phase

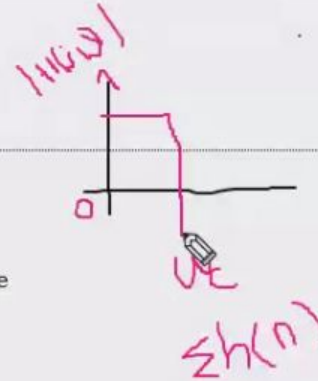
Filter- Frequency selective network

$$H(Z) = Y(Z)/X(Z) = 1 + Z^{-1} = \frac{1 + z^{-1}}{1 + z^{-1}}$$

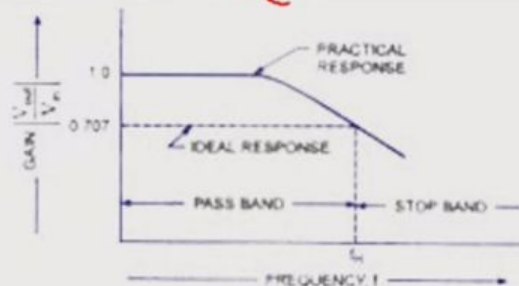
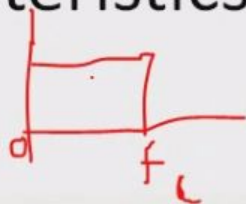
POLES

$$y(n) - 3y(n-1] = x(n)$$

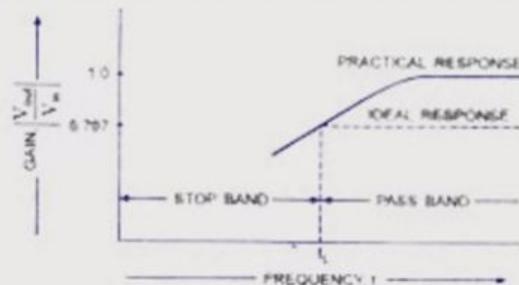
$$Y(z) - 3z^{-1}Y(z) = X(z)$$

Activate Windows
Go to Settings

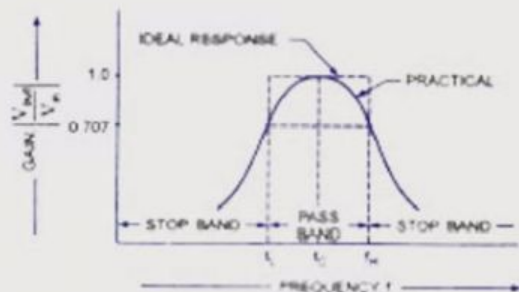
Characteristics of Commonly used Analog filters



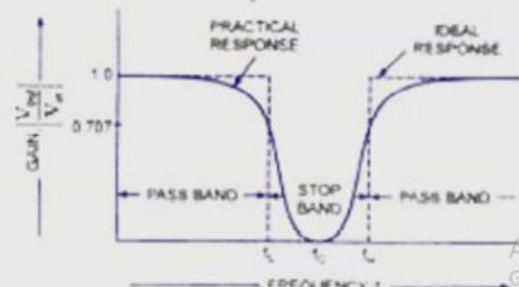
(a) Low-pass Filter



(b) High-pass Filter



(c) Band-pass Filter



(d) Band-stop Filter



You

