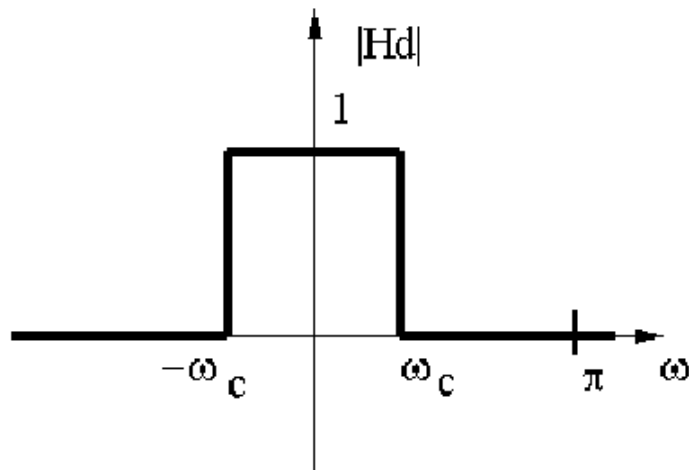


### Q1\_ WHAT IS THE FILTERING

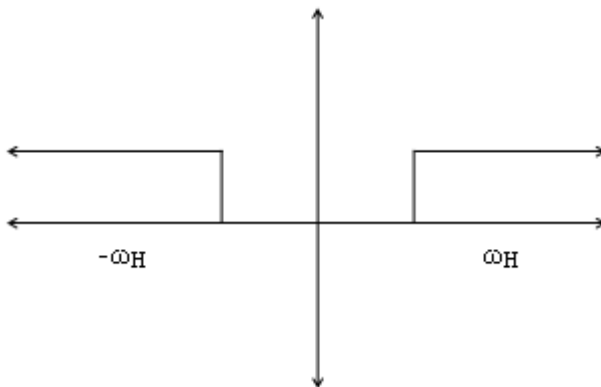
Filtering is the process by which the relative amplitudes of the frequency components in a signal are changed or perhaps some frequency components are suppressed.

### Q2\_ WHAT IS MOST COMMON TYPES OF IDEA FREQUENCIES-SELECTIVE FILTERING

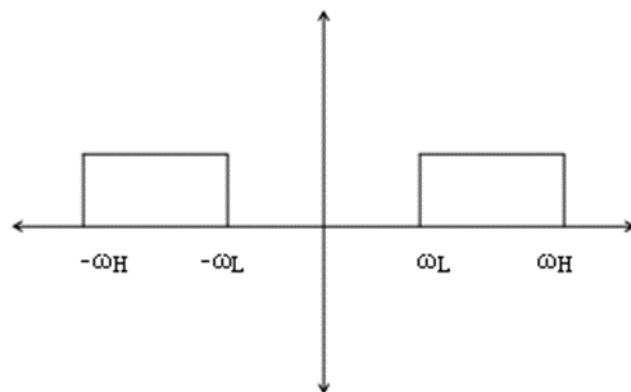
#### 1 Ideal Low-Pass Filter



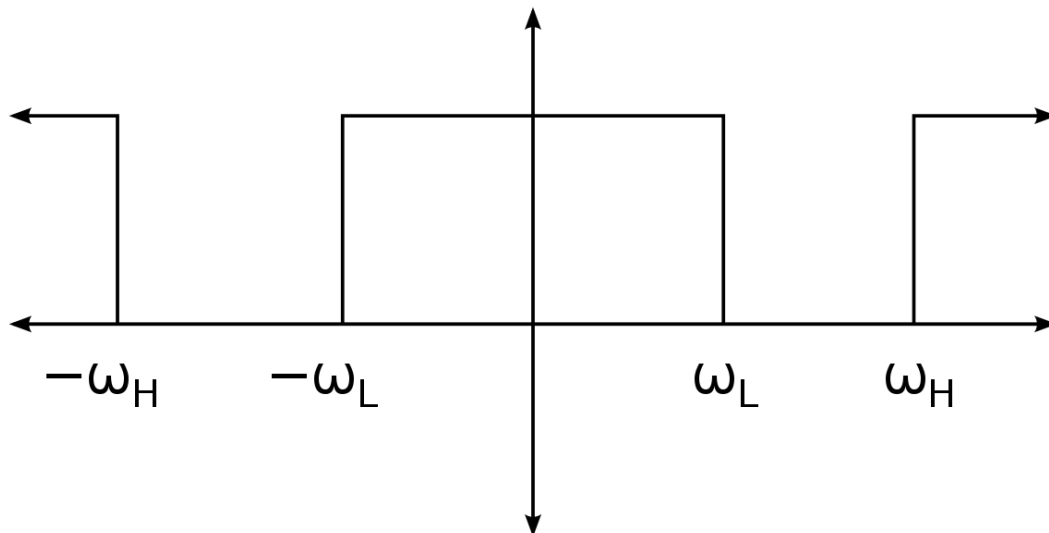
#### 2 Ideal High-Pass Filter



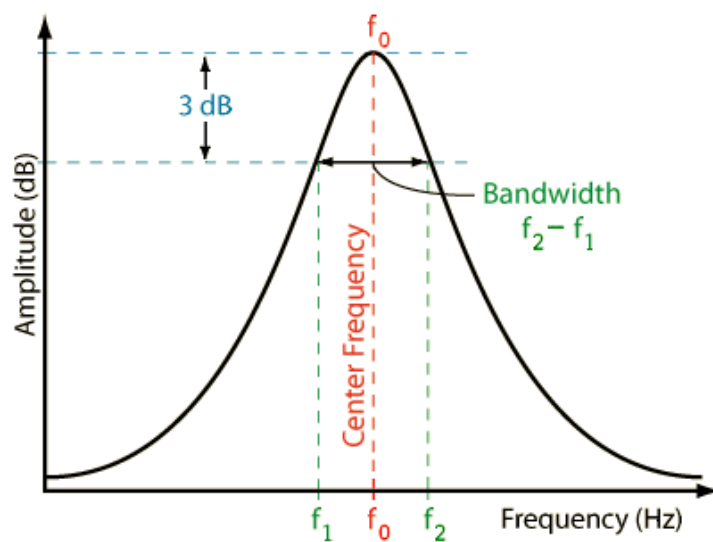
#### 3 Ideal Band pass Filter



#### 4 Ideal Band stop filter



#### Q3\_ DRAW EXAMPEL FOR FILTER BANDWIDTH



#### Q4\_ WHAT IS THE SIGNAL BANDEIDTH

The bandwidth of a signal can be defined as the range of positive frequencies in which most of the energy or power lies.