

## SECTION - 2

- 4) • For FIR Low Pass Filter, from plot of impulse response, x axis varies till almost 135. So, number of MAD's required for FIR Low Pass Filter = 135
- For FIR Band Pass Filter, from plot of impulse response, x axis varies till almost 138. So, number of MAD's required for FIR Band Pass Filter = 138
- For FIR High Pass Filter, from plot of impulse response, x axis varies till almost 135. So, number of MAD's required for FIR High Pass Filter = 135
- For IIR Band Pass Filter, we can see that the values of the numerator and denominator variables  $bwbpdz$  and  $bwbpnz$  vary to 1x65 double. Thus  $M = 65$ . So,  
Number of MADs =  $2m+1 = 2(65)+1 = 131$
- For IIR High Pass Filter, we can see that the values of the numerator and denominator variables  $bwhpdz$  and  $bwhpnz$  vary to 1x20 double. Thus  $M = 20$ . So,  
Number of MADs =  $2m+1 = 2(20)+1 = 41$
- For IIR Low Pass Filter, we can see that the values of the numerator and denominator variables  $bwlpdz$  and  $bwlpnz$  vary to 1x27 double. Thus  $M = 27$ . So,  
Number of MADs =  $2m+1 = 2(27)+1 = 55$