

MMI504

Exercise .6

1. Design a resonant filter with a varying resonant frequency starting from 200 Hz to 2 kHz with a bandwidth of 100 Hz. Use the following inputs and apply the filter on it
 - a. Square wave
 - b. Saw-tooth wave

2. Design the following filters using FDA Tool
 - a. Design a low-pass and high-pass filter with a transition Bandwidth of 2kHz with an A_{stop} of 100 dB and A_{pass} of 10 dB.
 - b. Design a band-pass filter with an f_{c1} around 1.5 kHz, f_{c2} around 3 kHz and an A_{stop1} and A_{stop2} of 60 dB