

As the length of the rectangular window increases, what characteristic/s is/are exhibited by the main lobe?

- 1> main lobe widens (frequency resolution decreases)
- 2> main lobe narrows (frequency resolution increases)
- 3> main lobe narrows (frequency resolution decreases)
- 4> main lobe widens (frequency resolution increases)

How much is the difference between the main lobe and the first side lobe?

- 1> 6 dB
- 2> 8 dB
- 3> 13 dB
- 4> 10 dB

Which of these statements is correct?

- 1> using a rectangular window introduces ripples in the pass band as well as stop band
- 2> using a rectangular window introduces ripples in the pass band only
- 3> using a rectangular window introduces ripples in the stop band only
- 4> using a rectangular window introduces smooth variations in the pass band only

What kind of filter is averaging operation?

- 1> All Pass Filter
- 2> Band Pass Filter
- 3> Low Pass Filter
- 4> High Pass Filter

What would be equivalent of a low pass filter with cutoff frequency 1 KHz connected in series with a high pass filter with cutoff 2 KHz?

- 1> Low-pass filter with cutoff 1 KHz
- 2> High-pass filter with cutoff 2 KHz
- 3> Band-pass filter with lower cutoff 1 KHz and higher cutoff 2 KHz
- 4> Band-stop filter with lower cutoff 1 KHz and higher cutoff 2 KHz