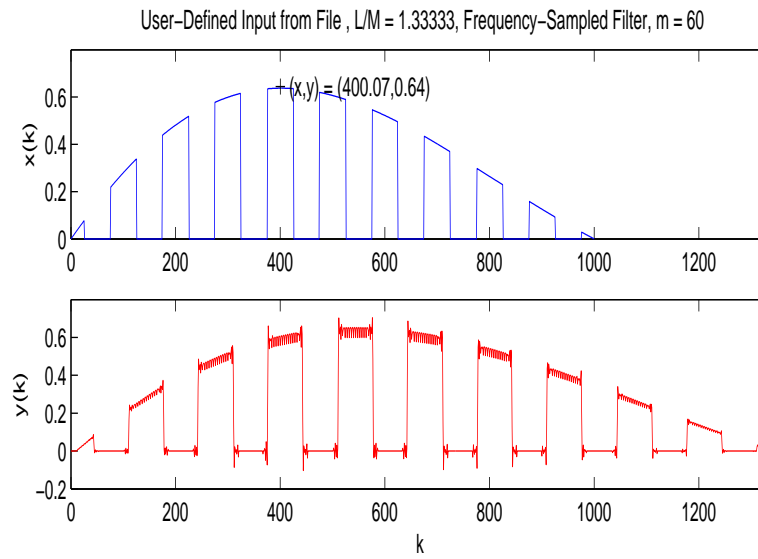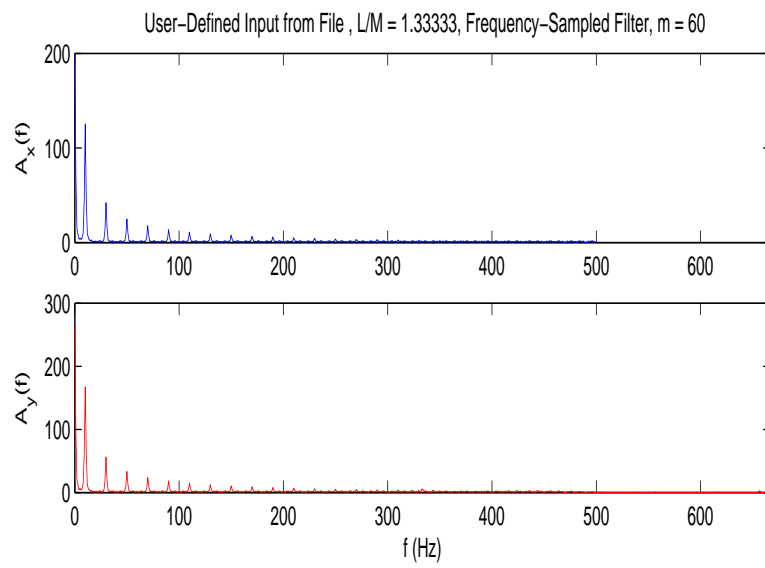**7.25** Use the GUI module *g_multirate* and the User-Defined input option to load the MAT-file *u_multirate1*. Convert the sampling rate using $L = 4$ and $M = 3$ using a frequency-sampled filter of order $m = 60$. Plot the following.

   (a) The time signals with the peak of $x(k)$ marked with the Caliper option

   (b) Their magnitude spectra

   (c) The filter magnitude response

Solution
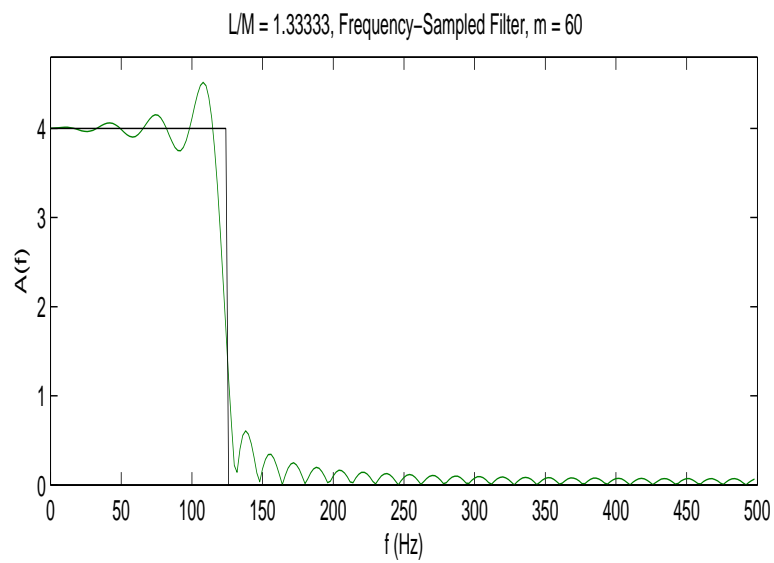

(a) Time Signals

(b) Magnitude Spectra

(c) Filter Magnitude Response