Examination Feedback for EEE309 Digital Signal Processing
Spring Semester 2013-14

Feedback for EEE309 Session: 2013-2014

Feedback: Please write simple statements about how well students addressed the exam paper in general and each individual question in particular including common problems/mistakes and areas of concern in the boxes provided below. Increase row height if necessary.

General Comments:

Overall it is a good performance.

Question 1:

For 1.a, the key is to know the two main properties of the discrete complex exponential sequences, i.e. periodicity in frequency and non-periodicity in time (in general).   For 1.b, most of the students have no problem. However, some made mistakes in giving the right convolution equation.   For 1.c, the key is to understand what is impulse response and there are still some students struggling in this.   For 1.d, there are many details involved in the four Fourier-related transforms, and no one gave a 100% correct answer.

Question 2:

For 2.a, most of the students have no problem with it. Only a few of them forgot to change the sign of the coefficients.   For 2.b, many have forgotten the zero of the system at z=0.   For 2.c, it is not difficult, but some made some minor mistakes since it involves a lot of calculations.   For 2.d, only a few students struggled to give the correct process.

Question 3:

For 3.a, a standard question. Most of the students can give the correct result.   For 3.b, most of the students could not give the correct details of the block diagram for D to A conversion.   For 3.c, again a standard question. The main thing is to remember the two equations.

Question 4:

For 4.a, many made mistakes in calculating the FIR filter coefficients.   For 4.b, some could not give the correct pole vector and zero vector, and also made mistakes in giving the phase response result.   For 4.c, this may be the most difficult question and only a few can give the complete derivation.