Examination Feedback for EEE6209– Advanced Signal Processing (Part A)
Spring Semester 2014-15

Feedback for EEE6209 – part A Session: 2014-2015

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:

The overall performance in this exam was very good. Specific feedback for each question are listed below.

Question 1:

This question was very popular and answered well. However, some students did not demonstrate good understanding in question 1.d and 1.e as they struggled to appreciate the resulting in filter was a high pass filter and to derive its time and frequency domain characteristics from the corresponding low pass filter, previously addressed in 1.c. In 1.f, most students lost marks for not deriving the recursive implementation and not clearly labeling the symbols in the complexity estimations.

Question 2:

This question was also very popular and very well answered. Most marks were lost in 2.a, where most students struggled derive the correct frequency response after sampling rate conversions. 2.b was very well attempted and showing very good understanding in deriving the filter parameters for multi-stage decimation. Well done!. Some answers to 2.c was poor as they missed some steps in the argument.

Question 3:

This was the least popular question and the worst performed question. Basically, the answers did not demonstrate good understanding of the concepts learned in the topic 3. Good understating in concepts of orthogonality in transforms, matrix representation of transforms, and the computation of the inverse transform was not evident in the answers.

Question 4:

The main problem is question c and only a couple of the students gave the right derivation for the beam response and its simplified version.

Question 5:

This question is easy overall and one issue is some students did not use the right update equation for the LMS algorithm.

Question 6:

The main issue b. Many students got the right result for (i), but there are many mistakes in the details of the derivation process. Most of the students could not give the right equation for the Method of Steepest Descent for (ii).