

Examination Feedback for EEE317 – Principles of Communications
Spring Semester 2013-14

Feedback for EEE317 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:

Question 1:

- (a) Has been answered correctly by most students.
- (b) The most common mistake is deriving the SNR at the input and output of the demodulator without explaining the SNR improvements reasons.
- (c) Many students made a mistake by calculating the efficiency of the generated Huffman code with respect to the entropy.
- (d) Most of the students answered this correctly. At the same time, a considerable number of students did not answer this part.

Question 2:

- (a) and (b) Have been answered correctly by most students.
- (c) Most common mistake is drawing the state diagram correctly.
- (d) Although soft decisions have been explained correctly by most students, there was a noticeable problem with explaining hard decisions.

Question 3:

- (a) A common mistake with the matched filter for Figure 3 is that most of the students did not take account of the $(0.5T)$ time interval and solved the question assuming duration of T .
- (b) The most common mistake is the detailed description and derivations of matched filters.
- (c) Answered correctly by most students.
- (d) Few students plotted the diagrams correctly without explaining the QPSK signal.

Question 4:

- (a) Answered correctly by most students.
- (b) Many students listed one problem and did not mention the lack of 2-valued auto-correlation.
- (c) A common mistake is to explain the DSSS instead of the FHSS.
- (d) Although most students solved this correctly, few have used PN code at three, or four, times the signal frequency.