

Examination Feedback for EEE6220 – Electronic Communication technologies
Spring Semester 2014-15

Feedback for EEE6220 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:

Question 1:

A very well answered question

Part a: Although most could calculate the voltage and current at 50kHz some did not use these values in the calculation of the noise voltage.

Part b: Most struggled with this. Some students showed understanding of shield cut-off but could not apply this to make the required calculation.

Question 2:

Generally well answered.

Part a: Most had problems with part (i). This seemed to come from a lack of fundamental understanding of power density.

The majority of mistakes were with the implementation of the equation used to calculate the noise voltage.

Part b: Most students did well. Some students used the wrong equation for calculating the reflection loss

Question 3:

a. Many students made a mistake by explaining the basics of the Smith chart instead of listing the steps that should be followed in the solution of transmission line problems

b. This has been solved correctly by most students.

c. Although this is very similar to a question from a previous exam paper, no student managed to solve it even though they have been advised to look at past years' exam papers for EEE6035.

d. This has been explained in the lecture and entirely given in the handout, but majority of students couldn't solve it either by leaving it blank or drawing the wrong equivalent circuits with irrelevant comments.

Question 4:

a. Answered correctly by most students.

b. Although this is given exactly in the lecture notes, most of the students skipped it and didn't write a single comment as an answer.

c. Few student made a common mistake by deriving the scattering parameters for the given network, which is too long and not required. As a result, mistakes have been made in the derived expressions, which effected the solution.

d. Answered correctly by many students. However, few made a mistake by assuming the given angle of 100 is radian instead of degrees.