

Feedback for EEE6035 Session:2010-2011

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) Common mistakes are explaining the distributed elements representation of transmission lines, conjugate matching, as well as the quarter wavelength transformer.
- (b) Has been answered correctly by most students.
- (c) Many students couldn't answer this question. Some of those who attempted it tried to calculate the inverse tan of an imaginary number.
- (d) Most students managed to solve this part reasonably well. However, few made a common mistake by deriving the input impedance equation.

Question 2:

- (a) Most of the students couldn't answer this correctly as they explained the procedure of using the Smith chart in transmission line analysis
- (b) Many students have managed to answer this part correctly. Other students made a mistake with calculating the overall attenuation as $2\alpha d\Gamma$ instead of $\Gamma e^{-2\alpha d}$.
- (c) Most students have managed to answer this part correctly.

Question 3:

- (a,b) Most students have managed to answer these correctly.
- (c) This has not been answered correctly by the majority of the students. Some students explained the SFD, and others derived the S parameters equations without explaining physically how the waves interact with each other
- (d) Most students have managed to answer this part correctly.

Question 4:

Few students have attempted this question and nearly all of them have answered parts a,b, and c correctly. However, few students didn't draw the constant gain circles in part (d) properly even if they have calculated the centers and radii correctly.,