Examination Feedback for EEE334_6012 – Antennas, Radar & Navigation
Spring Semester 2012-13

Feedback for EEE334_6012 Session: 2012-2013

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) Well answered but common mistakes include numerical errors and not knowing basic equations. Some of the derivations lack3ed detail and explanation
b) An easy question. Some marks lost for lack of detail
c) The "sting". The way to answer this question was to calculate the relative velocity of the car in the direction of the radar. This involved calculating the road gradient from the equation of the curve

Question_2:

a) A standard bookwork answer. Marks were lost for lack of detail and poor explanations

b) A straight forward question requiring the use of the bi-static radar equation. Need to work out the return path distance from the 3,4,5 triangle. Numerical errors and taking the loss as positive!

c) Straight forward if students understand the concept of burn through range. Numerical errors mixing dB and liner units

Question_3:

a) Bookwork

b) Main error in part i) was failing to work out the frequency from the length of dipole
Similar error in part ii) for monopole. Also impedance of monopole half that of dipole

c) Main error was that students calculated total radiated power but did not then use this to calculate directivity

Question_4:

a) Bookwork
b) Some students did not understand the concept of orthogonal polarisation
c) Most students answered the first part correctly but in the second part failed to understand that a linear dipole will always receive the same power from a CP field.
d) Generally well answered but some numerical erors