Feedback for EEE6012 Session:2006-2007

<u>Feedback:</u> 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:

Overall students performed well on the paper with an average mark of around 60%. Questions 1 and 3 were attempted by most students with questions 1 and 4 being less popular.

Question 1:

Part A: common mistake was failing to relate the equation for directivity to radiated power

Part B: In i) some students failed to realise that the dipole was half a wavelength long and used the wrong equation for radiation resistance

Part C: answered well

Question 2:

Part A: No real problems but some students failed to provide sufficient detail.

Part B: Essentially book work, generally attempted well

Part C: Straight forward link calculation, some students used wrong formula gain etc

Question 3:

Part A: Essentially book work and caused no problem to students who had revised

Part B: Book work derivation of the radar equation – some students lost marks for failing to provide sufficient detail

Part C: Generally attempted well. Most common mistake was taking the value of -32dB to be the absolute gain of the sidelobe and not the relative gain

Question 4:

Part A: Straight forward Doppler radar problem which was attempted well by most students

Part B: Essentially book work

Part C: A difficult problem for many students, the most common mistake was failing to calculate the relative velocity of the target at the edge of the main beam of the antenna.