

Examination Feedback for EEE6430 – Mobile Networks and Low Level Protocols  
Spring Semester 2011-12

**Feedback for EEE6430 Session: 2011-2012**

**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) Bookwork.
- (b) Some could remember burst structures better than multi-frame structures.
- (c) A few managed to calculate the exact timings. Needed to know timeslot and (multi) frame epochs.
- (d) Most differentiated between broadcast and point to point messaging.

**Question 2:**

- (a) Most gave correct answers to the first three parts, but the power density from the first side lobe incident on a pedestrian's head was not achieved by many. Most forgot to subtract the side lobe attenuation from the main lobe gain.
- (b) The elevation E-plane pattern was generally sketched correctly, but not the azimuth H-plane.
- (c) Most got the idea about pedestrian's being safe, and about the main lobe firing into a first floor window, with varying degrees of supporting calculations.

**Question 3:**

- (a) Bookwork.
- (b) Some confused uplink and downlink bit rates.
- (c) Needed to appreciate the 50% DTX duty cycle.

**Question 4:**

- (a) Generally the textual descriptions were better than the diagrams of the RAKE receiver.
- (b) Straightforward answers.
- (c) Most confused the antenna pointing angles with the relative signal phase shift between the antennas. The angles  $\phi_{A,B}$  were clearly described as antenna pointing directions.