

Examination Feedback for EEE6430 – Mobile Networks and Low Level Protocols
Spring Semester 2012-13

Feedback for EEE6430 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:

Overall exam average reasonable and within the bounds I would have expected.

Question 1:

Third most popular question.

- (a) Generally adequately answered from book work
- (b) The main issue here was people using the normal burst length rather than the random access burst length when calculating the sinc spectral envelope.
- (c) Non-linearity causing 217Hz intermodulation products was being sought here.

Question 2:

Second most popular question, lowest average mark.

- (a) Adequately answered from bookwork.
- (b) Confusion when to use relative dB unit or actual dBm power unit. Most included additional body loss and antenna gain parameters.
- (c) Most knew how to use the range formula, but the issue of factors affecting the range was poorly answered.

Question 3:

Least popular question.

- (a) Some confusion with GSM, mainly bookwork.
- (b) The 90% time slot occupancy of the CCPCH reducing the average data rate by a factor of 0.9 caused some confusion.
- (c) The main issue here was the fact that both of the channels were being sent in parallel, which halved the bit rates.

Question 4:

Most popular question. Highest average mark.

- (a) Most identified the four types of diversity gain, but a few were confused with multiple access trunking issues.
- (b) Most appreciated odd/even half wavelength path differences causing destructive/constructive interference. However, quite a few did not calculate the wavelength to enough significant figures, causing inaccuracy when divided into the path length difference.
- (c) Not many appreciated the influence of the antenna azimuth radiation pattern here.