

Feedback for EEE417/ 6041 Session:2008-2009

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:

Many candidates dropped marks by not including units.

Question 1:

This question was popular and well answered in general. Some candidates lost marks as they simply quoted the equation for the dispersion of the fibre without deriving it. Part b was usually answered very well or poorly. This type of analysis was discussed thoroughly in lectures and similar problems are in the problem sheets.

Question 2:

This was the least popular question. This was surprising as it was the least mathematical of all questions and relied upon the re-interpretation of notes.

Question 3:

Whilst part a was well answered, most candidates failed to describe the factors influencing the transition probabilities. Judging by the quality of the answers it appears that this was by error – i.e. failing to carefully read the question. Part b (i-iii) was not answered so well. The current density – threshold gain should have been attributed a $y=mx+c$ relationship to determine the current density, etc. Many candidates were able to discuss the limits to modulation bandwidth in part c.

Question 4:

Part a was well answered. Part b required the photocurrent and load resistance to be determined. These could be left as variables to partially complete the question (or assumed e.g. a load resistance of 50 ohms). Many candidates failed to provide units to the currents. Part c was well tackled.