

Feedback for EEE417 Session:2006-2007

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:

The majority of candidates made a good effort.

Question 1:

Many candidates seemed to spend a lot of time on section a describing the physical origin and wavelength dependence of loss and dispersion, whilst only the manner in which these parameters affect an optical pulse was required. The remainder of the question was generally answered well.

Question 2:

Most candidates made good answers to this question. Crosstalk mechanisms in DWDM systems was generally poorly answered.

Question 3:

Some confusion was demonstrated by candidates in the responsivity (a measure of the efficiency of converting photons to current) and frequency response (maximum data rate).

Question 4:

This question was the least answered question of the paper, although good marks were obtained by candidates who did attempt it. Section a related to absorption and emission processes, not the lasing conditions w.r.t. round trip gain and phase requirements. Section d was generally well answered, with well reasoned and insightful answers.