

### **Feedback for EEE6041 linked with EEE417 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:**

Part (a) was generally well answered, with high average marks. However, most candidates ignored the contribution due to ultraviolet absorption. For part (b), which was also generally well answered, some candidate did not provide a clear explanation as to the origins of dispersion, and most candidates ignored another important advantage of laser diodes, namely, "short recombination of lifetime of carriers". Sections (i) and (ii) of Part (c) were not well answered with candidates failing to calculate the photon energy. The rest parts of the question were generally well answered.

**Question 2:**

For part (a), the "constructive interference" needs to be highlighted. Part (b) and (c) were not well answered, although very good marks were obtained by several candidates. This was surprising as it relied on the re-interpretation of the lecture-notes. Part (d) was generally well answered.

**Question 3:**

Part (a) was generally well answered, with high average marks; Part (b) was not well answered. Some candidates mis-used the refractive index as the reflectivity; Section (iii) of Part (b) was generally well answered.

**Question 4:**

This was the least popular question. This was disappointing as it was the least mathematical of all questions and relied on the re-interpretation of the lecture-notes.