

## 2005 Paper 3 Question 8

### Computer Graphics and Image Processing

- (a) Calculate the maximum resolution needed by a movie projector in a movie theatre. Clearly state any assumptions that you make. [6 marks]
- (b) Describe, in detail, an error diffusion algorithm for converting greyscale images to bi-level black and white images at the same resolution. [8 marks]
- (c) Explain how this could be extended to provide an algorithm to print full colour RGB images on a CMYK laser printer, assuming that one pixel in the image maps to one pixel on the printer. [6 marks]