

2004 Paper 7 Question 14

E-Commerce

A company proposes to introduce a new e-mail service, one with a small postage charge for each message. It is believed that by charging for each message sent the amount of spam will be reduced.

The response rate for spam is about 0.005%, that is about five in a hundred thousand messages elicit a positive response.

- (a) Estimate a price that might economically discourage spam. [5 marks]
- (b) Describe approaches to handling the micro-payments involved. [5 marks]
- (c) What is meant by a *network externality*, and how might it be overcome in this case? [5 marks]
- (d) The postage charges might be credited to the recipient, less a handling fee. Describe a mechanism for this. [5 marks]