

Question 4.

- (a) How does the concept of "risk" apply to computer systems? (5)
- (b) Give two examples of network vulnerabilities and two of implementation vulnerabilities (5)
- (c) Describe a countermeasure for each of the examples you chose in part (b) (5)
- (d) What new vulnerabilities do you consider likely to become more important over the next few years? (5)

Question 5

- (a) Outline some of the common reasons for sending spam (5)
- (b) How does DKIM attempt to ameliorate the spam problem? Include an outline design for a system that would use DKIM. (10)
- (c) What will be the effect of widespread adoption of DKIM? (5)

Question 6

You are a system designer developing a new social-networking supported web-based mail application.

- (a) What requirements you would try to meet, in order to protect your users from spam and other malware? (10)
- (b) Say how your system would meet each of those requirements. (5)
- (c) What would be the effect of the system design outlined above? (In terms of the disposition of spam/malware,) (5)
- (d) Lastly, given all of the above, describe how you would attack the system, if you were a spammer. (5)