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)