N5 **Computing Homework**

Information Systems
Design & Development

Grade:
/ 15

Security Risks & Precautions - 2

Name:

Answer the questions below in the spaces provided.

1. Limiting physical access to a computer system is one method that can be used to protect data. Using an example of a computer system, explain why this method is not always possible? (2)

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2. Bank of Dundee has offices in every major city and town in Scotland. As the bank regularly transfers customers personal information from one branch to another, it is vital that the data is unreadable should it be intercepted by someone during a transfer.
Describe how you would ensure that, during transfer, Bank of Dundee's data remains unreadable. (1)

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3. In a dentist's surgery, information about patients is stored on a computer database.
Describe a method that the dentist could use to ensure that other surgery staff can not access the information about his patients. (1)

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4. "The process of unlawfully breaking into computer systems to gain access for private and confidential information."

What activity is being described above? (1)

_____

5. Describe **three** methods used to disrupt the running of a computer network and its services in a Denial of Service attack? (3)

1. _____

_____
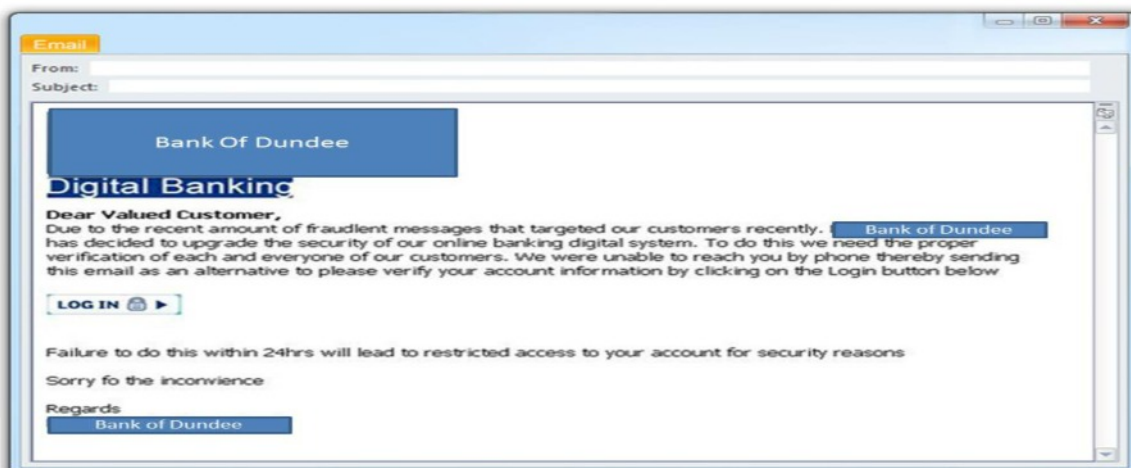
2. _____

_____

3. _____

_____

6. Samantha receives this email from the Bank of Dundee.

a) State the type of email received by Samantha (1)

_____

b) State why Samantha might not think that this is a genuine email. (1)

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c) What may happen should Samantha follow the instructions in the e-mail? (1)

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7. Describe the purpose of a *firewall* on a network. (1)

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8. King Burger is currently upgrading computer systems and the network they run on and with all these changes is concerned about network security.

a) King Burger is very aware that computer viruses are a serious threat to computer systems. Describe how a computer virus works? (2)

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b) King Burger is considering installing anti-virus software onto computer systems to help keep them safe. Describe **one** method used by anti-virus software to detect viruses on a computer. (1)

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