MODULE G SECURITY · G5

# Data interception and theft

Original practice questions · 21 marks · ~25 minutes · OCR J277 spec 1.4.1, 1.4.2

Name _____ Date _____

**Instructions.** Answer all questions in the spaces provided. The marks for each part are shown in brackets [ ]. The total for this worksheet is **21 marks**.

## 1

**Total: 1 mark**

Tick (✓) **one** box to show which statement describes data interception. **[1]**

| Statement | Tick (✓) |
|---|---|
| A server is sent more requests than it can handle, so genuine users cannot reach it | |
| Data is captured while it is being transmitted across a network | |
| Software tries every possible password until one of them works | |
| A program that looks useful is installed, but it secretly carries out a harmful task | |

**2** **Total: 11 marks**

A café offers free Wi-Fi to its customers. One evening, a customer uses the Wi-Fi on their phone to log in to an online shop account and pay for an order. Someone sitting at another table is using a laptop with software that captures packets sent over the café's wireless network.

**(a)** Describe how data interception could take place on the café's wireless network. **[3]**

**(b)** Explain why the customer may not know that their data has been intercepted. **[2]**

**(c)** Explain why the café's wireless network is an easier target for data interception than a wired network would be. **[2]**

**(d)** Explain **two** purposes an attacker might have for intercepting the customer's data. **[4]**

1

2

## 3

**Total: 5 marks**

A recruitment agency keeps the personal details of thousands of job seekers. Staff store these records on laptops, which they take to meetings with employers.

**(a)** Give **two** ways the agency's data could be stolen, other than by intercepting it while it is transmitted. **[2]**

1

2

**(b)** Tick (✓) **one** box in each row to show whether each statement is true or false. **[3]**

| Statement | True | False |
|---|---|---|
| Encrypting a laptop's storage prevents the laptop from being stolen | | |
| If an encrypted laptop is stolen, the thief cannot understand the data without the key | | |
| Data theft can be carried out by a person who works for the organisation | | |

## 4

**Total: 4 marks**

The recruitment agency wants to limit the threat of its data being stolen. **[4]**
Identify **two** prevention methods the agency could use. For each method, explain how it limits data theft.

Method 1

How it limits data theft

Method 2

How it limits data theft

**Total for this worksheet: 21 marks**