MODULE G SECURITY · G7

Preventing attacks 1: firewalls, anti-malware and updates

Original practice questions · 21 marks · ~25 minutes · Cambridge 0478 syllabus 5.3.2

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: 4 marks

(a) Tick (✓) **one** box in each row to show which security solution each description matches. **[4]**

Description	Firewall	Anti-virus	Anti-spyware	Automating software updates
Installs patches that fix weaknesses in the operating system as soon as they are released				
Checks the traffic between a network and the internet against a set of rules				
Finds and removes software that secretly records the keys a user presses				
Scans files and compares them with a record of known viruses				

2 **Total: 5 marks**

A small accountancy firm keeps its clients' financial records on a server in its office. The office network is connected to the internet. The network manager sets up a firewall between the network and the internet.

(a) Describe what the firewall does with the traffic that arrives from the internet. **[3]**

(b) Give **two** examples of rules that the network manager could set on the firewall. **[2]**

1

2

3 **Total: 6 marks**

The firm installs anti-malware software, including anti-virus and anti-spyware, on every computer.

(a) Describe how the anti-virus software helps keep the firm's data safe from viruses. **[3]**

(b) State **one** way the anti-spyware software helps keep the clients' financial details safe. **[1]**

(c) Explain why the anti-malware software must be updated regularly. **[2]**

4 **Total: 3 marks**

The network manager sets every computer in the firm to install software updates automatically, instead of leaving staff to install them.

(a) Explain how automating software updates helps keep the firm's data safe. **[3]**

5 **Total: 3 marks**

One of the accountants says: "Now that we have a firewall, we do not need the anti-malware software."

(a) Explain why the accountant is **not** correct. **[3]**

Total for this worksheet: 21 marks