

CSc Theory Worksheet 1

AS Level -9618

Paper 1

Topic: Chapter 6 - Security

1 (a) Viruses, pharming and phishing are all examples of potential Internet security issues.

Explain what is meant by each of these **three** terms.

Virus

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Pharming

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Phishing

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(b) An online bank requires a client to supply an 8-digit code each time they wish to access their account on the bank's website.

Rather than ask the client to use a keyboard, they are requested to use an on-screen keypad (shown on the right) to input the 8-digit code.

The position of the digits on the keypad can change each time the website is visited.

The client uses a mouse or touch screen to select each of the 8 digits.

2	5	1
6	8	3
9	0	4
	7	

(i) Explain why the bank has chosen to use this method of entering the 8 digits.

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(ii) Name and describe **another** measure that the bank could introduce to improve the security of their website.

Name

Description

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(b) The following stages take place when a user wishes to access a secure website.

Put each stage in sequence by writing the numbers 1 to 6 in the column on the right. The first one has been done for you.

Stage	Sequence number
the encrypted data is then shared securely between the web browser and the web server	
the web browser attempts to connect to a website which is secured by SSL	1
the web server sends the web browser a copy of its SSL certificate	
the web browser requests the web server to identify itself	
the web server will then send back some form of acknowledgement to allow the SSL encrypted session to begin	
the web browser checks whether the SSL certificate is trustworthy; if it is, then the web browser sends a message back to the web server	