Question	Answer	Marks
6(a)	Range (check)	**1**
6(b)	Presence (check)	**1**
6(c)	Existence (check)	**1**

Question	Answer	Marks
8(a)	**1 mark** per bullet point • Security protects data against loss • Privacy protects data against unauthorised access	**2**
8(b)	**1 mark** for a correct answer • Two factor authentication • Biometric passwords • Key Card Access • Firewall	**1**

Question	Answer	Marks
8(c)	**1 mark** per correct answer to **max 2** • Malware // viruses // spyware // by example • Hacking • Phishing • Pharming	**2**

Question	Answer	Marks
2(a)	**1 mark** per bullet point • security is protecting data from loss / corruption • integrity is ensuring the consistency / accuracy of the data	**2**
2(b)(i)	**1 mark** per bullet point • validation checks that data is reasonable / sensible • example e.g. checking data is the right number / type of characters	**2**
2(b)(ii)	**1 mark** per bullet point • verification checks that data is the same as the original • by example e.g. double entry	**2**
2(c)	**1 mark** per similarity to **max 2** • Both are pieces of malicious software • Both are downloaded / installed/run without the user's knowledge • Both can pretend to be / are embedded in other legitimate software when downloaded // both try to avoid the firewall • Both run in the background **1 mark** for difference • Virus can damage computer data; spyware only records / accesses data • Virus does not send data out of the computer; spyware sends recorded data to third party • Virus replicates itself; spyware does not replicate itself	**3**

Question	Answer	Marks
3(a)	Security prevents against **loss** while privacy prevents **unauthorised access**	**1**
3(b)	**1 mark** for identifying threat, **1 mark** for description, **1 mark** for security measure (**times 2**) e.g. • Malware • Malicious software that replicates and can delete/damage the examination papers • Install and run anti-malware • Hacker/unauthorised access • Illegal access in order to delete/damage the examination papers • Use a firewall // strong passwords • Spyware • Software installed on the computer without the teacher's knowledge which records keystrokes and sends the data gathered about the examination papers to a third party • Use a firewall / install and run anti-spyware / use a virtual (onscreen) keyboard	**6**

4(d)	**1 mark** per bullet point to **max 3** for validation e.g. • **range check** to make sure it is between 0 and max marks • **presence check** to make sure a mark is entered • **type check** to make sure an integer value is entered **1 mark** per bullet point to **max 2** for verification e.g. • double entry - enter the mark twice and **the computer** compares them • visual check – **manually** compare the mark entered with the mark on the input document	**4**

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>1(a)</td><td>1 mark for each correctly completed term.

Validation checks that the data entered is reasonable. One example is a presence check.
Verification checks that the data entered is the same as the original. One example is double entry.</td><td>4</td></tr>
<tr><td>1(b)</td><td>1 mark for each correct entry

<table>
<tr><th>Security measure</th><th>Description</th></tr>
<tr><td>Disk mirroring</td><td>Data are written on two or more disks simultaneously.</td></tr>
<tr><td>Encryption</td><td>Contents are scrambled so they cannot be understood without a decryption key</td></tr>
<tr><td>Backup</td><td>A copy of the data is taken and stored in another location</td></tr>
</table>
</td><td>3</td></tr>
</table>