MODULE I IMPACTS AND THE LAW · I5

The Computer Misuse Act 1990: mark scheme

21 marks · OCR J277 spec 1.6.1

How to use. 1 mark per bullet up to the maximum shown. **/** separates alternative answers; **//** separates alternative statements for the same mark. Words in (brackets) are not needed for the mark. **NE** = not enough. Spec point covered: J277 1.6.1 legislation relevant to Computer Science: the Computer Misuse Act 1990, its purpose and the specific actions it allows or prohibits. The law is as at November 2026. Offence numbers, section numbers and maximum sentences are credited but never required. For the third offence, accept the original wording (unauthorised *modification* of computer material) and the amended wording (unauthorised acts with intent to *impair* the operation of a computer / access to data).

QUESTION	ANSWER	MARKS	GUIDANCE
1 J277 1.6.1	To make it illegal to access computer systems / data without permission // to make unauthorised access / hacking illegal To make it illegal to change / delete / damage data or harm a computer's operation without permission (e.g. spreading malware) To allow people who hack / misuse computers to be prosecuted / punished // to deter hacking	**1**	1 mark per bullet, max 1. "To stop misuse of computers" / "to protect computers" alone = NE (repeats the name of the Act). Do not accept answers about storing personal data (Data Protection Act) or copying work (Copyright Designs and Patents Act). Credit any other valid answer.
2 J277 1.6.1	Looking at files without permission is an offence, even if nothing is changed: True Security tester with written permission breaks the Act: False Making a virus so another person can use it in an attack can be an offence: True The Act sets out how organisations store and use personal data: False	**4**	1 mark per correct row. 2+ ticks in a row = 0 for that row.
3(a) J277 1.6.1	Offence: unauthorised access to computer material // accessing a computer system / data without permission // (offence 1 / section 1) Why: he no longer works there / is using someone else's login, so he has no permission to access the system // he only looks at the data, without changing it or intending to commit a further crime	**2**	1 mark for the offence, 1 mark for the reason. Accept "hacking" for the offence in (a) only. A number alone (e.g. "offence 1") with no description = NE. The reason mark can be given even if the offence is wrong or missing. Credit any other valid answer.

QUESTION	ANSWER	MARKS	GUIDANCE
3(b) J277 1.6.1	Offence: unauthorised access with intent to commit / facilitate a further offence // (offence 2 / section 2) Why: he plans to use the card details to commit another crime, e.g. fraud / theft / buying goods with other people's cards	**2**	1 mark for the offence, 1 mark for the reason. "Unauthorised access" alone for the offence = NE (does not best match). The reason must refer to the plan / intent to use the details for a further crime; "he copied data" alone = NE. The reason mark can be given even if the offence is wrong or missing. Credit any other valid answer.
3(c) J277 1.6.1	Offence: unauthorised modification of computer material // unauthorised act (with intent) to impair the operation of a computer / access to data // (offence 3 / section 3) Why: he deletes / changes / destroys data without permission // he stops the system working properly / stops the garden centres taking orders	**2**	1 mark for the offence, 1 mark for the reason. Accept "damaging / deleting data without permission" as the offence. "Unauthorised access" alone = NE. The reason mark can be given even if the offence is wrong or missing. Credit any other valid answer.
4(a) J277 1.6.1	Unauthorised act (with intent) to impair the operation of a computer // stopping a computer / website / server working (properly) without permission // unauthorised modification of computer material // (offence 3 / section 3)	**1**	Accept "carrying out a denial of service attack (is illegal under the Act)". "Unauthorised access" alone = NE (the attack does not need access to the system). A number alone = NE.
4(b) J277 1.6.1	The Act (as amended) makes it illegal to make / supply / sell / obtain tools / software / malware for use in computer misuse offences The seller supplied software made to carry out attacks // advertised it for knocking websites offline ... so the seller knew / believed it was likely to be used to commit an offence (e.g. a denial of service attack) Helping / assisting someone else to commit an offence under the Act can be prosecuted	**2**	1 mark per bullet, max 2. "Selling the software is illegal" alone = 1 mark (first bullet, BOD). "Because the seller is a hacker" = 0. Credit any other valid answer.

QUESTION	ANSWER	MARKS	GUIDANCE
5 J277 1.6.1	She accessed the booking system / other guests' data without permission / authorisation ... which is unauthorised access to computer material // (offence 1 / section 1) // hacking The offence happens when she gets in without permission // it does not matter that she changed nothing Reporting the weakness afterwards / having good intentions does not make it legal // permission must be given before access (e.g. as in authorised penetration testing)	**3**	1 mark per bullet, max 3. The answer must conclude (or clearly imply) that she **has** broken the Act; an answer that concludes she has not broken it scores 0. "Yes" alone = 0. Do not accept offence 2 or offence 3 as the offence. Credit any other valid answer.
6 J277 1.6.1	Makes hacking / unauthorised access to the shop's systems illegal (1) ... so attackers can be prosecuted / punished (e.g. fined / sent to prison) // so people are deterred from trying (1) Makes spreading malware / deleting or changing data without permission illegal (1) ... deters attacks that could damage the shop's systems / data // the attacker can be punished (1) Makes it illegal to stop a computer working, e.g. denial of service attacks (1) ... deters attacks that would take the website offline / lose the shop sales (1) Makes accessing a system to commit further crimes (e.g. fraud) illegal (1) ... deters criminals from stealing customers' card / payment details to use them // allows heavier punishment (1) Makes making / supplying hacking tools or malware illegal (1) ... so it is harder for attackers to get the tools // sellers of tools can be prosecuted (1)	**4**	Mark in pairs: 1 for what the Act makes illegal, 1 for how this protects the shop / customers. The second mark depends on the first. Two different ways needed. "It stops hackers" / "it keeps the shop safe" alone = NE: must say what is made illegal or punishable. Do not accept "it prevents all attacks" (the law deters and punishes; it does not physically block attacks). Do not credit Data Protection Act points (e.g. how the shop must store customer data). Credit any other valid answer.

Total: 21 marks