



Mark Scheme

Additional Sample Assessment
Material

Pearson BTEC Level 3 - IT

Unit 1: Information Technology Systems
31760H

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Unit 1: Information Technology Systems – sample marking grid

General marking guidance

- All learners must receive the same treatment. Examiners must mark the first learner in exactly the same way as they mark the last.
- Marking grids should be applied positively. Learners must be rewarded for what they have shown they can do, rather than be penalised for omissions.
- Examiners should mark according to the marking grid, not according to their perception of where the grade boundaries may lie.
- All marks on the marking grid should be used appropriately.
- All the marks on the marking grid are designed to be awarded. Examiners should always award full marks if deserved. Examiners should also be prepared to award zero marks, if the learner's response is not rewardable according to the marking grid.
- Where judgement is required, a marking grid will provide the principles by which marks will be awarded.
- When examiners are in doubt regarding the application of the marking grid to a learner's response, a senior examiner should be consulted.

Specific marking guidance

The marking grids have been designed to assess learner work holistically. Rows in the grids identify the assessment focus/outcome being targeted. When using a marking grid, the 'best fit' approach should be used.

- Examiners should first make a holistic judgement on which band most closely matches the learner's response and place it within that band. Learners will be placed in the band that best describes their answer.
- The mark awarded within the band will be decided based on the quality of the answer, in response to the assessment focus/outcome and will be modified according to how securely all bullet points are displayed at that band.
- Marks will be awarded towards the top or bottom of that band, depending on how they have evidenced each of the descriptor bullet points.

ICT Unit 1 SAM 2

Question Number	Answer	Mark
1a	<p>Award one mark for requirement and one mark for explanation up to a maximum of two marks each.</p> <p>The data subject must consent to the data being processed (1) trainers/delegates must sign/indicate that they agree to their data being processed. (1)</p> <p>The processing must be necessary in order to carry out the specified task (1) e.g. paying staff/taking payments for courses/organising courses. (1)</p>	4

Question Number	Answer
1bi	<p>Answers will be credited according to the learner's demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below. The indicative content that follows is not prescriptive. Answers may cover some/all of the indicative content but should be rewarded for other relevant answers.</p> <p>Learners discuss the implications of accessing training materials and delegate information using a VPN.</p> <p>Benefits of using VPN</p> <p>The VPN will give trainers secure access to resources on the LAN when they are not in the head office.</p> <p>Will need to have laptops set up so that a VPN client can be launched. This will enable the server and laptop to verify each other as authentic and subsequently all internet communication will be encrypted and secured from eavesdropping.</p> <p>Trainers will use a log in and password to access the VPN.</p> <p>The VPN gives secure access even when delegates are using unsecured public networks.</p> <p>The delegates' information must be kept secure to comply with the DPA, using the VPN will help ensure security.</p> <p>Hotels frequently have unsecured networks. Trainers will be in hotels, etc. overnight if they are delivering meetings on consecutive days, or if they have to travel long distances from home.</p> <p>Trainers may be home based and may have to travel to venues, trains, coffee shops, etc. service areas/stations may provide unsecured WiFi.</p>

	<p>Types of material that will be accessed</p> <p>The delegates attending courses may change at short notice, trainers will need to have access to up-to-date lists and detail information. Similarly, they will need to provide head office with information about attendance.</p> <p>Trainers will need access to the latest versions of training materials, therefore they must have access to the LAN at all times when they are not in the head office.</p> <p>The trainers may need to provide feedback on courses to allow materials to be updated.</p> <p>The trainers may need to provide attendance information for billing purposes/follow up with delegates.</p> <p>May need to communicate with head office, e.g. via email if any issues/queries arise.</p>
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Mark scheme (award up to 6 marks) refer to the guidance on the cover of this document for how to apply levels-based mark schemes*.

Level	Mark	Descriptor
Level 0	0	No rewardable material.
Level 1	1-2	<p>Technical vocabulary is used but it is not used appropriately to support arguments, in relation to the issues of the question.</p> <p>Issues are identified but chains of reasoning are not made, leading to a superficial understanding of the relative importance of issues to the scenario.</p> <p>Does not link arguments to the given scenario.</p>
Level 2	3-4	<p>Accurate technical vocabulary is used to support arguments but not all arguments are relevant to the issues of the question.</p> <p>There is consideration of relevant issues using logical chains of reasoning, but does not reflect on their relative importance to the given scenario.</p> <p>Considers the various elements of the question and but does not always link arguments to the given scenario.</p>
Level 3	5-6	<p>Fluent and accurate technical vocabulary is used to support arguments that are relevant to the issues of the question.</p> <p>There is a balanced and wide ranging consideration of relevant issues, using coherent and logical chains of reasoning, that shows a full awareness of their relative importance to the given scenario.</p> <p>Carefully considers the various elements of the question and links arguments to the given scenario.</p>

Question number	Indicative content
1bii	<p>Answers will be credited according to the learner’s demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below. The indicative content that follows is not prescriptive. Answers may cover some/all of the indicative content but should be rewarded for other relevant answers.</p> <p>Learners analyse the additional risks to data that arise from using shared laptops and suggest measures that can be taken to reduce the risks.</p> <p>Learners must analyse how the following threats are an issue due to shared access.</p> <p>The analysis may include reference to:</p> <ul style="list-style-type: none"> • network/network server • laptops • storage devices. <p>Potential threats to stored data</p> <ul style="list-style-type: none"> • Viruses and other malware can corrupt or delete stored data, which would at least inconvenience the company but could potentially be very expensive to correct/re-enter. • Unauthorised access/hackers can have major impact on the company by accessing information, e.g. financial information, and on trainers and delegates, e.g. personal information. • Accidental damage to data, e.g. lost data, can be very expensive to retrieve. • Phishing has the potential to take and use personal information for illegal/improper purposes. <p>Techniques for preventing unauthorised access to the laptops</p> <ul style="list-style-type: none"> • Firewall installed on the laptops in addition to the network to prevent unauthorised access. • Password protection on the laptop, provides access to the trainers but prevents unauthorised access. • Set up user areas on the laptop for individual trainers that are password protected. • Access levels for trainers • File permissions for trainers <p>Techniques for preventing other threats to data stored on the laptops</p> <ul style="list-style-type: none"> • Anti-virus/Malware software installed on laptops <p>Physical methods to protect data stored on laptops and storage devices</p> <ul style="list-style-type: none"> • Laptops, other portable devices and storage devices are at risk of loss/theft. Trainers must take responsibility for ‘looking after’ the laptops when in their possession, e.g. locked away overnight, never left in a room that is not locked. • Trainers should use external storage devices with caution, applying the same sort of physical access

		controls to storage devices, e.g. USB drives/external hard drives.
Mark scheme (award up to 8 marks) refer to the guidance on the cover of this document for how to apply levels-based mark schemes*.		
Level	Mark	Descriptor
Level 0	0	No rewardable material.
Level 1	1–2	Technical vocabulary is used but it is not used appropriately to support arguments, in relation to the issues of the question. Issues are identified but chains of reasoning are not made, leading to a superficial understanding of the relative importance of issues to the scenario.
Level 2	3–5	Accurate technical vocabulary is used to support arguments but not all arguments are relevant to the issues of the question. There is consideration of relevant issues using logical chains of reasoning, but does not reflect on their relative importance to the given scenario.
Level 3	6–8	Fluent and accurate technical vocabulary is used to support arguments that are relevant to the issues of the question. There is a balanced and wide ranging consideration of relevant issues, using coherent and logical chains of reasoning, that shows a full awareness of their relative importance to the given scenario.

Question Number	Answer	Mark
2a	<p>Award one mark for identification and one additional mark for appropriate expansion, up to a maximum of two marks each.</p> <p>Tutor's anti-virus/malware software may see a compressed file as a threat (1) which would block access to the file. (1)</p> <p>The college email system may quarantine the file (1) and the tutor may not be aware that the work has been submitted. (1)</p> <p>Compression type might not be compatible with the tutor's system (1) files will not be readable and will have to be resent (by Josie) in a different format. (1)</p> <p>Some of Josie's files may already be in a compressed format and 'compression' might increase the size of the file being sent (1) increasing the time taken to receive the file. (1)</p> <p>Tutor's system will need to use processing time to extract/decompress the file (1) which may be problematic if using a low specification older computer. (1)</p> <p>Decompressing the file adds a memory load on the tutor's system (1) causing the system to lag/slow down. (1)</p>	4

Question Number	Answer	Mark
2b	<p>Award one mark for identification and one additional mark for appropriate expansion, up to a maximum of two marks each.</p> <p>Josie's tutor would need to view photographs in their original quality in order to assess the work (1) lossy format may affect the quality of the image and may therefore affect her mark/lossless format would have no impact on the quality. (1)</p> <p>Josie may need to reduce the photograph/image file size to transfer them to the tutor (by email) (1) and therefore a lossy format would result in a smaller file size than a lossless format. (1)</p>	4

Question Number	Answer	Mark
2c	<p>Answers will be credited according to the learner’s demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below. The indicative content that follows is not prescriptive. Answers may cover some/all of the indicative content but should be rewarded for other relevant answers.</p> <p>Learners analyse how the features of SSDs make them suitable for use in tablet devices.</p> <p>Flash storage has no moving parts so suitable for portable devices because they:</p> <ul style="list-style-type: none"> • are more robust • are lighter • are quieter • generate less heat. <p>HDDs rely on spinning platters and read/write heads, etc. limiting how small they can be manufactured.</p> <p>SSDs rely on a system of interconnected flash memory chips that can be built on to the motherboard/main board, which means that:</p> <ul style="list-style-type: none"> • tablets can manufactured in a smaller form • there is more space within a tablet for other components that will improve the ways the device can be used (GPS sensor, camera/image sensor, larger battery). <p>Shock proof</p> <ul style="list-style-type: none"> • Data is written electronically so data can be accessed while the device is being moved without risk of interruption or corruption. • No mechanical parts mean the data on the drive will not be corrupted if the device is dropped (which is more likely in a handheld device than a desktop computer). <p>Cooling</p> <ul style="list-style-type: none"> • Generate very little heat (compared to traditional HDDs) so device does not require additional cooling methods, which allows for smaller and lighter devices. <p>Power consumption</p> <ul style="list-style-type: none"> • Use less power than traditional HDDs as read/write operations do not require the system to run motors to drive HDD spindles, read heads, etc. 	6

Mark scheme (award up to 6 marks) refer to the guidance on the cover of this document for how to apply levels-based mark schemes*.

Level	Mark	Descriptor
Level 0	0	No rewardable material.
Level 1	1-2	<p>Technical vocabulary is used but it is not used appropriately to support arguments, in relation to the issues of the question.</p> <p>Issues are identified but chains of reasoning are not made, leading to a superficial understanding of the relative importance of issues to the scenario.</p>
Level 2	3-4	<p>Accurate technical vocabulary is used to support arguments but not all arguments are relevant to the issues of the question.</p> <p>There is consideration of relevant issues using logical chains of reasoning, but does not reflect on their relative importance to the given scenario.</p>
Level 3	5-6	<p>Fluent and accurate technical vocabulary is used to support arguments that are relevant to the issues of the question.</p> <p>There is a balanced and wide ranging consideration of relevant issues, using coherent and logical chains of reasoning, that shows a full awareness of their relative importance to the given scenario.</p>

Question Number	Answer	Mark
2d	<p>Award one mark for identification and one additional mark for each appropriate expansion.</p> <p>HDDs are less expensive than SSDs for the same amount of storage (1) Josie is likely to need a large amount of storage for graphics files (1) however with an SSD she would need to buy/use external storage. (1)</p>	3

Question Number	Answer	Mark
2e	<p>Award one mark for each of the following, up to a maximum of three marks.</p> <p>The memory manager needs to allocate blocks of memory to applications (and data) (1) the memory manager should allow many applications to occupy memory at the same time (1) the applications need to be protected from one another so that they do not overwrite each other. (1)</p>	3

Question	Answer	Mark
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Number		
2f	<p>Answers will be credited according to the learner's demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below. The indicative content that follows is not prescriptive. Answers may cover some/all of the indicative content but should be rewarded for other relevant answers.</p> <p>Learners discuss the advantages and disadvantages of using open source rather than proprietary software.</p> <p>Advantages of open source:</p> <ul style="list-style-type: none"> • simpler licensing requirements/no pirating or copyright issues • code is visible/released so it can be checked for errors/adapted to needs • has a faster update/bugfix cycle • developers/authors respond faster to user requests for changes • uses open standards so better compatibility • developed by a community/group who work together to deal with problems/questions • continually evolving. <p>Disadvantages of open source:</p> <ul style="list-style-type: none"> • may be abandoned by the author/developer leaving users without support/with an obsolete product – author has no responsibility to keep software updated • documentation – support may be poor • may be expensive to hire specialist support if required • security issues with external support/no controlled support channels • software that mimics commercial products will lag behind them • faster update cycle can mean more work for administrators • source code may branch, creating multiple versions. 	6

Mark scheme (award up to 6 marks) refer to the guidance on the cover of this document for how to apply levels-based mark schemes*.

Level	Mark	Descriptor
Level 0	0	No rewardable material.
Level 1	1-2	<p>Technical vocabulary is used but it is not used appropriately to support arguments, in relation to the issues of the question.</p> <p>Issues are identified but chains of reasoning are not made, leading to a superficial understanding of the relative importance of issues to the scenario.</p> <p>Does not link arguments to the given scenario.</p>
Level 2	3-4	<p>Accurate technical vocabulary is used to support arguments but not all arguments are relevant to the issues of the question.</p> <p>There is consideration of relevant issues using logical chains of reasoning, but does not reflect on their relative importance to the given scenario.</p> <p>Considers the various elements of the question and but does not always link arguments to the given scenario.</p>
Level 3	5-6	<p>Fluent and accurate technical vocabulary is used to support arguments that are relevant to the issues of the question.</p> <p>There is a balanced and wide ranging consideration of relevant issues, using coherent and logical chains of reasoning, that shows a full awareness of their relative importance to the given scenario.</p> <p>Carefully considers the various elements of the question and links arguments to the given scenario.</p>

Question Number	Answer	Mark
3a	<p>Award one mark for each identification point and one additional mark for appropriate expansion.</p> <p>Should use multiple-choice questions where there are a fixed number of options (1) can use simple data analysis tools to produce accurate results. (1)</p> <p>Rating scales can be used to measure customer opinion or attitudes (1) can use simple data analysis tools to produce accurate results. (1)</p> <p>Comment/Essay box/Free response questions can be used where opinions are required (1) responses must then be viewed individually/ require sophisticated text analysis tools/hard to extract precise data. (1)</p> <p>The language used should avoid jargon or overly technical concepts (1) respondents will lose interest and quit the survey/produce random answers. (1)</p> <p>The focus should be on one idea at a time/avoid multiple ideas (1) these will confuse respondents/ make questions hard to answer/make the results unreliable. (1)</p> <p>The language must ensure that there is no bias towards one answer (1) this will violate a survey's objectivity/skew responses. (1)</p> <p>Accept any other relevant phrasing/wording.</p>	4

Question Number	Answer	Mark
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3b	<p>Answers will be credited according to the learner's demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below. The indicative content that follows is not prescriptive. Answers may cover some/all of the indicative content but should be rewarded for other relevant answers.</p> <p>Analyse how the features of an automated stock control system will impact on both the company and on online customers.</p> <p><u>Implications for customers</u> Customers must have accurate, up-to-date information, therefore it is essential the system must operate in real time.</p> <p>The system must record how many of each item is currently in stock in the warehouse.</p> <p>Have a record of outstanding orders of a specified product and the expected delivery date, which will then inform customers of their expected delivery dates if they pre-order/reserve.</p> <p><u>Implications for the company</u> The company must ensure that they do not hold too much stock as this will have financial implications such as paying for storage space/financial investment in the stock held. However, understocking can also have implications, e.g. if customers find that they have to wait for goods they are likely to take their business elsewhere.</p> <p>An efficient automated system will allow for 'just in time' (JIT) ordering, items will only be ordered as they are needed.</p> <p>The system will record minimum, maximum and reorder stock levels. If the minimum/maximum stock level is reached the system must automatically alert the company so that action can be taken. When reorder stock levels are reached automatic reordering will be triggered.</p> <p>The system needs to be able to predict the stock levels needed based on previous sales and also take into account that certain items of stock may be seasonal. Some sales are triggered by other factors such as the weather, which can be hard to predict, and this may need workers to be able to override the system.</p>	6
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Mark scheme (award up to 6 marks) refer to the guidance on the cover of this

document for how to apply levels-based mark schemes*.

Level	Mark	Descriptor
Level 0	0	No rewardable material.
Level 1	1-2	<p>Technical vocabulary is used but it is not used appropriately to support arguments, in relation to the issues of the question.</p> <p>Issues are identified but chains of reasoning are not made, leading to a superficial understanding of the relative importance of issues to the scenario.</p>
Level 2	3-4	<p>Accurate technical vocabulary is used to support arguments but not all arguments are relevant to the issues of the question.</p> <p>There is consideration of relevant issues using logical chains of reasoning, but does not reflect on their relative importance to the given scenario.</p>
Level 3	5-6	<p>Fluent and accurate technical vocabulary is used to support arguments that are relevant to the issues of the question.</p> <p>There is a balanced and wide ranging consideration of relevant issues, using coherent and logical chains of reasoning, that shows a full awareness of their relative importance to the given scenario.</p>

Question Number	Answer	Mark
3c	<p>Award one mark for any four of the following.</p> <p>SSL (secure sockets layer) added to HTTP to add layer of security (to give HTTPS)/security certificate. (1)</p> <p>SSL uses encryption to secure the data (1) only those with the 'key' can read the data. (1)</p> <p>SSL certificate provides private communication channels for data transmission/only the website server and the customer's device. (1)</p> <p>Accept any other relevant phrasing/wording.</p>	4

Question Number	Answer	Mark
3d	<p>Award one mark for identification and one additional mark, up to a maximum of two, for each appropriate expansion.</p> <p>Perceivable (1)</p> <ul style="list-style-type: none"> • Provide text alternatives for non-text content (1) • Provide captions and alternatives for audio and video content (1) • Make it available to assistive technologies (1) • Use sufficient contrast to make things easy to see and hear(1) • Make content adaptable (1) <p>Operable (1)</p> <ul style="list-style-type: none"> • Make all functionality keyboard accessible (1) • Give users enough time to read and use content (1) • Do not use content that causes seizures (1) • Help users navigate and find content (1) <p>Understandable (1)</p> <ul style="list-style-type: none"> • Make text readable and understandable (1) • Make content appear and operate in predictable ways (1) • Help users avoid and correct mistakes (1) <p>Robust (1)</p> <ul style="list-style-type: none"> • Maximise compatibility with current and future technologies (1) <p>Allow marks where candidates provide examples.</p> <p>Accept any other relevant phrasing/wording.</p>	6

Question number	Indicative content
4a	<p>Answers will be credited according to the learner’s demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below. The indicative content that follows is not prescriptive. Answers may cover some/all of the indicative content but should be rewarded for other relevant answers.</p> <p>Learners analyse the benefits to <i>Claersons</i> of a move to a cloud-based software and storage system.</p> <p>Using a ‘Software as a Service’ (SaaS) as an alternative to the current system will bring advantages to <i>Claersons</i>. In the traditional current system <i>Claersons</i> had to build the server, install the application and configure it.</p> <p>Using SaaS <i>Claersons</i> don’t physically buy a server but access a part of a much larger server, which is off-site away from the business.</p> <ul style="list-style-type: none"> • Reduction in initial capital expenditure as there are no upfront costs for expensive hardware. • No need to pay for technical staff, either in-house or on a consultancy basis to design, install or configure the system. • No need to pay for technical staff to maintain the system/ deal with user issues, etc. • <i>Claersons</i> will not need to buy the software, instead it can use a subscription-based/pay as you go model. This will give it authorisation to use the software for a period of time and pay only for the software that is used. • Server capacity can be scaled up and down to fit the needs of the business. This has the added benefit of being better for the environment than running a server with excess capacity. • <u>Claersons</u> can become more competitive as it has access to up-to-date technology (without having to make huge investments). • SaaS will give <i>Claersons</i> robust disaster recovery, which would otherwise be unlikely due to lack of finance and expertise. <p>Additional benefits arise because <i>Claersons</i> uses software provided by the suppliers.</p> <ul style="list-style-type: none"> • The suppliers will take care of software updates for <i>Claersons</i>, reducing the need for staff to do it. This in turn can lead to a reduction in staffing costs as highly qualified technicians won’t be needed. • Ensures that software is up to date for all users of the system. • Security updates are included in this and this ensures that all security software is as up to date as possible, overcoming new threats to data. • Cloud business applications are offered by suppliers much cheaper than bespoke packages or other commercially

	<p>available software.</p> <p>Benefits to staff.</p> <ul style="list-style-type: none"> • Because the system can be used anywhere with an internet connection, staff will be able to access the files/folders/software when they are out of the office. • Many suppliers provide mobile apps that will allow staff to access data on a range of devices. • Some staff, e.g. office staff, may be able to take advantage of the system and work from home. • Because all files are stored centrally everyone sees the latest/same version leading to improved collaboration. Reducing the problems of conflicting file content, formats and titles. <p>Reduces the implications/security risks of lost or stolen laptops and other mobile devices. Data stored on the cloud is automatically backed up and therefore instantly retrievable. Suppliers offer a remote 'wiping' system to remove sensitive data from devices.</p> <p>Improved security arises from the reduction in the need to send files via external methods such as email.</p>
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Mark scheme (award up to 10 marks) refer to the guidance on the cover of this document for how to apply levels-based mark schemes*.

Level	Mark	Descriptor
Level 0	0	No rewardable material.
Level 1	1-3	<p>Technical vocabulary is used but it is not used appropriately to support arguments, in relation to the issues of the question.</p> <p>Issues are identified but chains of reasoning are not made, leading to a superficial understanding of the relative importance of issues to the scenario.</p>
Level 2	4-7	<p>Accurate technical vocabulary is used to support arguments but not all arguments are relevant to the issues of the question.</p> <p>There is consideration of relevant issues using logical chains of reasoning, but does not reflect on their relative importance to the given scenario.</p>
Level 3	8-10	<p>Fluent and accurate technical vocabulary is used to support arguments that are relevant to the issues of the question.</p> <p>There is a balanced and wide ranging consideration of relevant issues, using coherent and logical chains of reasoning, that shows a full awareness of their relative importance to the given scenario.</p> <p>Various elements of the question are carefully considered and arguments are clearly linked to the given scenario.</p>

Question number	Indicative content
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4b	<p>Answers will be credited according to the learner’s demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below. The indicative content that follows is not prescriptive. Answers may cover some/all of the indicative content but should be rewarded for other relevant answers.</p> <p>Learners discuss the factors that <i>Claersons</i> should consider when making a change from the current system to a cloud-based system.</p> <p><u>Planning ahead</u> Once a decision to change has been made, all the groups need to be consulted to help set out an implementation plan. If everyone agrees about the way the change is to happen and the timescales are set, then the less likely it is to cause undue disruption.</p> <p><u>Staff training</u> Staff need to be retrained to use the new system, this will incur costs whether done in-house or using a training agency (perhaps provided by the cloud provider). Timing of the training will also need to be considered, during/outside normal working hours – both will have knock-on effects.</p> <p><u>Data migration</u> Need to consider how the data will be transferred to the new system. The data may not be in the required format and may have to be changed. It is likely that staff will be involved in this process. Need to consider the security of the data during transfer. Staff should be ready to provide feedback on issues/problems that may occur.</p> <p><u>Switching over</u> The company will need to consider how the switchover will be handled. A parallel changeover, after data has been migrated, will allow both systems to run side by side, but this can be costly and also needs careful monitoring. Alternative is to switch of the old system and start the new system after data has been migrated. The changeover should be planned/timed to minimise the damage to business processes.</p> <p><u>Disaster recovery</u> Should have a plan in place in the event of issues arising as this can be extremely costly for the business. The plan would need to cover how to restore the old system. Staff need to be confident that they can work with both systems – emphasis on need for early/thorough training.</p> <p><u>Support systems</u> Even after training, staff will need to have a support system in place if they need help. Some support can be built into the system. Other support may be provided by a helpdesk with trained IT staff on hand, possibly provided by the cloud provider.</p>
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Mark scheme (award up to 8 marks) refer to the guidance on the cover of this document for how to apply levels-based mark schemes*.

Level	Mark	Descriptor
Level 0	0	No rewardable material.
Level 1	1-2	<p>Technical vocabulary is used but it is not used appropriately to support arguments, in relation to the issues of the question.</p> <p>Issues are identified but chains of reasoning are not made, leading to a superficial understanding of the relative importance of issues to the scenario.</p> <p>Does not link arguments to the given scenario.</p>
Level 2	3-5	<p>Accurate technical vocabulary is used to support arguments but not all arguments are relevant to the issues of the question.</p> <p>There is consideration of relevant issues using logical chains of reasoning, but does not reflect on their relative importance to the given scenario.</p> <p>Considers the various elements of the question and but does not always link arguments to the given scenario.</p>
Level 3	6-8	<p>Fluent and accurate technical vocabulary is used to support arguments that are relevant to the issues of the question.</p> <p>There is a balanced and wide ranging consideration of relevant issues, using coherent and logical chains of reasoning, that shows a full awareness of their relative importance to the given scenario.</p> <p>Carefully considers the various elements of the question and links arguments to the given scenario.</p>

Question number	Indicative content
4c	<p>Answers will be credited according to the learner’s demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below. The indicative content that follows is not prescriptive. Answers may cover some/all of the indicative content but should be rewarded for other relevant answers.</p> <p>Discuss the factors that should be considered when decommissioning an organisation’s existing computer system.</p> <p><u>Backup</u> Must ensure that all data is backed up. Need to determine backup procedures. Data may be on central storage, e.g. network/server, or on individual devices, e.g. PCs/laptops/tablets.</p> <p><u>Data deletion</u> The company will need to ensure secure data disposal from all digital devices. May include: <ul style="list-style-type: none"> ▪ sensitive company private/confidential/financial information ▪ customer/staff personal data – i.e. data that needs to comply with the Data Protection Act. Data deletion methods Deletion of files/reformatting a hard disk: <ul style="list-style-type: none"> • data is NOT permanently deleted/files will still exist on the hard disk • only the file location information is deleted/files will not be detected by the operating system • could potentially be restored using specialised data recovery software. Data destruction software: <ul style="list-style-type: none"> • overwrites the entire hard disk with random data • original data can no longer be recovered • hard drive could potentially be reused/sold/donated to charity • no impact on the environment. Physical destruction: <ul style="list-style-type: none"> • specialist companies crush/shred hard disks to ensure that they are unusable • ensures that the data on it cannot be accessed • disadvantage is hardware is now worthless, will impact on the environment as it goes to landfill. <u>Equipment disposal and recycling</u> Recycling: <ul style="list-style-type: none"> • sale or donation to other organisations or individuals, need time and resources to organise/pay for professional services to do it • recycling parts of the equipment • minimises environmental impact </p>

	<ul style="list-style-type: none"> • can the equipment be used in other regional offices. <p>Disposal:</p> <ul style="list-style-type: none"> • safely disposing of hazardous waste • minimising the amount of equipment wasted. <p><u>Legal requirements</u></p> <p>Data Protection Act WEEE EU Directive Environment Act Waste Acceptance Criteria (WAC)</p> <p><u>Other considerations</u></p> <p>Who is going to carry out the work?</p> <p>IT department?</p> <ul style="list-style-type: none"> • increase data security (only people from the company would be involved) • cheaper • would staff have the required skills? <p>Specialist data destruction contractor?</p>
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Mark scheme (award up to 8 marks) refer to the guidance on the cover of this document for how to apply levels-based mark schemes*.

Level	Mark	Descriptor
Level 0	0	No rewardable material.
Level 1	1-2	<p>Technical vocabulary is used but it is not used appropriately to support arguments, in relation to the issues of the question.</p> <p>Issues are identified but chains of reasoning are not made, leading to a superficial understanding of the relative importance of issues to the scenario.</p> <p>Does not link arguments to the given scenario.</p>
Level 2	3-5	<p>Accurate technical vocabulary is used to support arguments but not all arguments are relevant to the issues of the question.</p> <p>There is consideration of relevant issues using logical chains of reasoning, but does not reflect on their relative importance to the given scenario.</p> <p>Considers the various elements of the question and but does not always link arguments to the given scenario.</p>
Level 3	6-8	<p>Fluent and accurate technical vocabulary is used to support arguments that are relevant to the issues of the question.</p> <p>There is a balanced and wide ranging consideration of relevant issues, using coherent and logical chains of reasoning, that shows a full awareness of their relative importance to the given scenario.</p> <p>Carefully considers the various elements of the question and links arguments to the given scenario.</p>

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