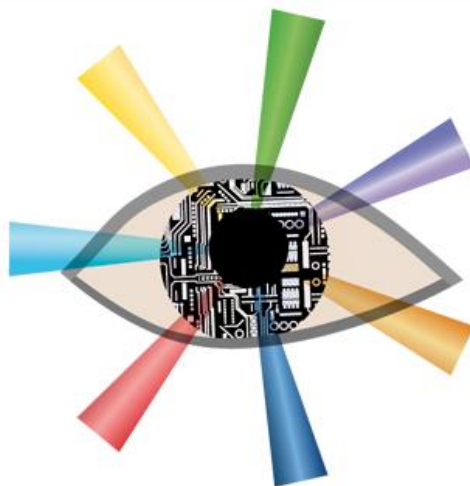




Mark Scheme (Results)

Summer 2017

BTEC Level 3 National in IT
Unit 1: Information Technology
Systems (31760H)



Information Technology

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Unit 1: Information Technology Systems –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.

Question Number	Answer	Mark
1a	<p>Award one mark for identification and one mark for each linked expansion point up to a maximum of two marks each.</p> <p>The ability to interact/communicate with customers (1) by commenting/responding to reviews/feedback (1) which will promote sales/build up customer relations/allow Ohman to improve his services (1)</p> <p>He could create a 'group' (for buyers and sellers of memorabilia) (1) which could lead to increased sales/contributions of memorabilia for his business (1)</p> <p>Can (post) comments/share photographs/videos of the products / text giving details of the products (1) which would be beneficial for individual items like memorabilia/constantly changing 'one off' stock/giving provenance/validity to the products (1)</p> <p>Can target specific demographics / can use hash tags (1) which will lead to a higher percentage of completed sales (1)</p> <p>Can post positive reviews/suggested improvements about Ohman's business (1) which may encourage potential customers to look at his website/buy products (1)</p> <p>Social networking sites offer measurability, such as statistics on how many times an advert/post has been viewed, shared or commented on (1) which will allow the business to monitor customer opinion and inform future actions/purchases of new stock (1)</p> <p>Accept any other appropriate response.</p>	4

Question Number	Answer	Mark
1b	<p>Award one mark for identification and one mark for each expansion point up to a maximum of two marks each.</p> <p>The nature of the business means that stock is constantly changing/all items are 'one off' (1) uploading new photos/information/videos can be time consuming (1)</p> <p>Customers may post negative comments/or write comments about issues encountered that could be visible to everyone (1) this could impact on the business if not dealt with quickly/effectively / requires constant monitoring of the pages (1)</p> <p>Can become costly over time if used on a cost per click basis (1) and this may not be reflected in increased sales (1)</p> <p>Must be proactive in maintaining page / must ensure it is up to date (1) to attract/maintain customer interest/ ensure maximising exposure/effectiveness (1)</p> <p>Accept any other appropriate response.</p>	4

Question Number	Indicative content
1c	<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 learners should be rewarded for other relevant answers.</p> <p>Learners should discuss the factors that should be considered before making a decision to upgrade the operating system.</p> <p>Needs to consider whether the new OS is necessary/worthwhile.</p> <p>Is the current system supported? Unsupported systems will:</p> <ul style="list-style-type: none"> • no longer receive product support, bug fixes, and patch releases • make the system vulnerable to unauthorised access/malicious attacks • result could be loss of data • impact on storage of customer data/DPA infringement. <p>Installing a new OS will have implications:</p> <ul style="list-style-type: none"> • cost <ul style="list-style-type: none"> o OS o installation o training • compatibility with <ul style="list-style-type: none"> o application software o communication software o security software o hardware • implementation <ul style="list-style-type: none"> o when o who • staff training <ul style="list-style-type: none"> o who o when o cost.

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.</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.</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.</p> <p>Carefully considers the various elements of the question and links arguments to the given scenario.</p>

Question Number	Indicative content
1d	<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 learners should be rewarded for other relevant answers.</p> <p>Learners should explain how Ohman can ensure he fulfils his obligations with respect to the display screen equipment element of the Health and Safety (Display Screen Equipment) Regulations 1992.</p> <p>Ohman must:</p> <ul style="list-style-type: none"> • analyse workstations to assess and reduce risks • make sure controls are in place • provide information and training • provide eye and eyesight tests on request, and special spectacles if needed • review the assessment when the user or DSE changes. For those who employ many users of DSE, this guidance <p>Collaboration with staff will help manage the potential problems by :</p> <ul style="list-style-type: none"> • helping spot the risks • making sure health and safety controls are practical • increasing the level of commitment to working in a healthy way. <p>Staff should be trained to follow these steps:</p> <ul style="list-style-type: none"> • make sure individual characters on the screen are sharp, in focus and don't flicker or move. If they do, the DSE may need servicing or adjustment • adjust the brightness and contrast controls on the screen to suit lighting conditions in the room • make sure the screen surface is clean • when setting up software, choose text that is large enough to read easily on screen when sitting in a normal comfortable working position • select colours that are easy on the eye (avoid red text on a blue background, or vice versa). <p>Ohman must:</p> <ul style="list-style-type: none"> • provide an eye test if a member of staff requests one • pay for a basic pair of frames and lenses if the test shows that the user needs glasses specifically for DSE work • provide further tests if DSE work is considered to cause visual fatigue and at regular intervals after the first test.

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.</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.</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.</p> <p>Carefully considers the various elements of the question and links arguments to the given scenario.</p>

Question Number	Answer	Mark
2a	<p>Award one mark for identification and one mark for each expansion point up to a maximum of two marks each.</p> <p>Biometric is unique (1) can't be copied/passed on to other people/ID cards that can be passed on to other users/stolen (1)</p> <p>Biometric is part of the person's physical presence (1) no need to carry an ID card/ID cards can be lost/damaged (1)</p>	4

Question Number	Indicative content
2b	<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 learners should be rewarded for other relevant answers.</p> <p>Learners discuss how user accounts impact on different user groups of the system.</p> <p>User groups created - Students, Teaching Staff, Administrative Staff, IT Technicians. All members of the group automatically get the same access rights.</p> <p>All users have a profile that shows what access rights the user has on the system, i.e. what they can/cannot access on the network</p> <p>Access rights include access to and limitations on what can be done in the following areas :</p> <ul style="list-style-type: none"> • files/folders • applications/software • hardware access • network administration. <p>All users will be able to log on to a workstation/PC and perform general user tasks.</p> <p><u>File access rights</u></p> <p>All users will be able to:</p> <ul style="list-style-type: none"> • access own files edit/delete them • access specified files in a shared area, copy to own user area. <p>Students will not be able to:</p> <ul style="list-style-type: none"> • access any other users' files • delete/edit files in the shared area. <p>Teachers will be able to:</p> <ul style="list-style-type: none"> • add files to the shared area • delete/edit files in the shared area • access/edit/create administrative files relating to students' progress. <p>Admin staff will be able to:</p> <ul style="list-style-type: none"> • access/edit files relating to their particular role, e.g. pupil admin, finance and HR, but will not be able to access admin files outside their remit. <p>IT Technicians will be able to access files required for network administration but are unlikely to be able to access admin files, e.g. pupil admin, finance and HR.</p> <p><u>Application/Software access rights</u></p> <p>Access to applications and software will be limited to what is deemed necessary to carry out the user's role.</p>

	<p><u>Hardware</u></p> <p>Access to certain printers/scanners, etc. may be restricted for all users often depending geographical location, but may be to do with types, e.g. colour printers, lasers, ink jet.</p> <p>Logging on to a PC may be limited for students, e.g. may not be able to log on to a 'teacher' PC.</p> <p><u>Network administration</u></p> <p>Generally restricted to IT Technicians, although some teachers may be able to carry out simple tasks such as changing passwords.</p> <p>IT Technicians do most administration tasks on the system:</p> <ul style="list-style-type: none"> • install new software, • change system settings • add/delete users • setting quotas, e.g. printing, user space • access everyone's files and folders • restricting internet access/restricting to particular websites.
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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.</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.</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.</p> <p>Carefully considers the various elements of the question and links arguments to the given scenario.</p>

Question number	Indicative content	
2c	<p>Answers will be credited according to the learner’s demonstration of knowledge and understanding of the material, using the indicative content and levels descriptors below. The indicative content that follows is not prescriptive. Answers may cover some/all of the indicative content but learners should be rewarded for other relevant answers.</p> <p>A diagram of a potential system/integration of IT systems and connections used to meet the requirements of the scenario.</p> <p>Diagram may include:</p> <p>devices:</p> <ul style="list-style-type: none"> • laptops (teachers and/or student) • personal computer (teachers and/or student) • peripheral devices, e.g. mouse, keyboard, graphics tablet • smartphone • digital camera • router • modem • switches <p>storage/data sharing:</p> <ul style="list-style-type: none"> • network server • USB/SD card • external hard drive <p>connections:</p> <ul style="list-style-type: none"> • personal computer connected to server using Ethernet • laptop (teacher) connected to server using WiFi • mouse connected to desktop/laptop using USB/Bluetooth • smartphone connected to laptop using USB/WiFi/Bluetooth • USB/eSATA to connect to portable hard drive • home broadband connection for VPN • (home) WiFi connection for laptop <p>data flow:</p> <p>The diagram should show descriptions of the data flow between components and show the direction in which data is exchanged.</p>	
<p>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*.</p>		
Level	Mark	Descriptor
Level 0	0	No rewardable material.

Level 1	1-3	<p>Diagram provides partial coverage of appropriate devices. Storage/Data sharing and connection types are used to meet some of the requirements of the scenario, with limited efficiency.</p> <p>Annotations of the data that will be shared between the components of the system are incomplete or contain inaccuracies.</p>
Level 2	4-7	<p>Diagram provides coverage of mostly appropriate devices. Storage/data sharing and connection types are used to meet the majority of the requirements of the scenario, but these may not always be the most efficient.</p> <p>Diagram includes mostly accurate annotations of the data that will be shared among the components of the system</p>
Level 3	8-10	<p>Diagram provides thorough coverage of appropriate device. Storage/data sharing and connection types are used to fully meet the requirements of the scenario.</p> <p>Diagram includes detailed and accurate annotations of the data that will be shared among the components of the system.</p>

Question Number	Indicative content
3a	<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 learners should be rewarded for other relevant answers.</p> <p>Learners discuss the advantages and disadvantages of collecting the information online rather than face to face in this instance.</p> <p>Advantages</p> <ul style="list-style-type: none"> • Most young adults are IT literate • Young people enjoy using technology and may be more willing to take part • Participants may feel more comfortable and willing to offer opinions/ ideas online • Participants more likely to concentrate on the questions, not be distracted • Questions can be structured • Questions are more focused than a face- to-face discussion, which can go 'off topic' • Participants do not need to travel to the centre • No need to organise a physical meeting room • May be able to provide tools to automatically collate the results • May be able to provide tool to analyse the results • Collating feedback from multiple participants can be automated <p>Disadvantages</p> <ul style="list-style-type: none"> • Not all young people have the technology/internet connection • May create a stigma for those without the required technology • The results could be skewed as those without the technology may be from poorer families/who may not be able to afford to take advantage of the new facilities • Those without the technology may be the ones who would gain most from additional services at the centre • Need an effective system for recording/summarising the main points of the discussion • The style of questions needs to be considered so responses are not restricted/limited

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.</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.</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.</p> <p>Carefully considers the various elements of the question and links arguments to the given scenario.</p>

Question Number	Answer	Mark
3bi	<p>Award one mark for identification and one mark for each expansion point up to a maximum of two marks each.</p> <p>Where there are three answers the second mark may be used as either an identification or an expansion point.</p> <p>Validation (1) Use (drop down) list for gender/title (1) to restrict field choice (to pre-set values) (1)</p> <p>Validation (1) Use format check / input masks for postcode/date of birth/telephone number) (1) to ensure correct formatting of fields/correct data type for each 'element' (1)</p> <p>Validation (1) Set length check for telephone number (1)</p> <p>Validation(1) Presence checks/ to check the data has been entered (1)</p> <p>Verification (1) Check that a postcode actually exists (1)</p> <p>Data type for complete telephone number (1) Must be text (1)</p> <p>Calendar for date of birth (1) to restrict field choice to accurate dates (1)</p> <p>Do not allow 'list' without expansion. Only award 'validation' once.</p>	6

Question Number	Indicative content
3bii	<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 learners should be rewarded for other relevant answers.</p> <p>Learners explain the factors that Joseph should consider when setting up the user interface for the online survey.</p> <ul style="list-style-type: none"> • Ease of use/intuitiveness <ul style="list-style-type: none"> ○ Obvious places for users to enter data ○ Have logical flow through the questions to help users navigate ○ Appropriate controls, e.g. buttons/radio buttons/tick boxes/drop down menus ○ Pop-up instructions to help users ○ Consistency layout/navigation/fonts/colours • Accessibility <ul style="list-style-type: none"> ○ Provide text alternatives for non-text content ○ Allow 'zoom' facility ○ Make it available to assistive technologies ○ Allow screen reader ○ Use sufficient contrast to make things easy to see ○ Make text readable/understandable/concise/simple • Functionality <ul style="list-style-type: none"> ○ Is all the functionality keyboard accessible? ○ Consider other ways of accessing, e.g. touch screen ○ Provide ways of 'undoing' incorrect responses • Performance <ul style="list-style-type: none"> ○ No lag between submission and next question • Compatibility <ul style="list-style-type: none"> ○ Consider different platforms, e.g. tablets/PC ○ Consider different operating systems, e.g. windows/IOS

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>Factors are identified but chains of reasoning are not made, leading to a superficial understanding.</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 factors using logical chains of reasoning.</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 factors, using coherent and logical chains of reasoning that shows a full awareness.</p> <p>Carefully considers the various elements of the question and links arguments to the given scenario.</p>

Question Number	Indicative content
3c	<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 learners should be rewarded for other relevant answers.</p> <p>Learners discuss the factors that need to be considered when designing the new class booking system in Springtop Leisure Complex.</p> <p>User experience</p> <ul style="list-style-type: none"> • Ease of use • Performance • Availability • Accessibility <p>Specifications/Compatibility</p> <ul style="list-style-type: none"> • Compatibility with current membership database • Compatibility with tablet/mobile devices/apps • Compatibility with different web browsers <p>Connectivity</p> <ul style="list-style-type: none"> • Server on site • Remote server/cloud • Bandwidth available <p>Cost</p> <ul style="list-style-type: none"> • Development cost • Hardware costs • Ongoing/Running costs • Training costs <p>Efficiency/Productivity</p> <ul style="list-style-type: none"> • System availability • Staff productivity <p>Implementation</p> <ul style="list-style-type: none"> • Timescales • Testing • Migration to new systems <p>Security</p> <ul style="list-style-type: none"> • Data protection • Encryption of data when booking via online service <p>Other</p> <ul style="list-style-type: none"> • Customer experience in the sports centre as not having to wait to book in to classes

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.</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.</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.</p> <p>Carefully considers the various elements of the question and links arguments to the given scenario.</p>

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 learners should be rewarded for other relevant answers.</p> <p>Learners evaluate the impact on IDC and its staff of a move to a cloud-based storage system.</p> <ul style="list-style-type: none"> • No need to pay for technical staff, either in-house or on a consultancy basis, to provide a backup system this will be done automatically. • Storage 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. • Will give IDC robust disaster recovery, which would otherwise be unlikely due to lack of finance and expertise. • 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. • Improved security arises from the reduction in the need to send files via external methods such as email. <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 when they are out of the office or working in regional offices. • 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>Disadvantages</p> <ul style="list-style-type: none"> • Must have an internet connection, could be a disadvantage to staff out of the office. • Introducing a third party may have security implications for IDC. • Training of staff • Impact of downtime

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*.

Mark	Descriptor
0	No rewardable material.
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.</p> <p>Does not link arguments to the given scenario.</p>
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.</p> <p>Considers the various elements of the question and but does not always link arguments to the given scenario.</p>
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.</p> <p>Carefully considers the various elements of the question and links arguments to the given scenario.</p>

Question Number	Indicative content
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 learners should be rewarded for other relevant answers.</p> <p>Learners evaluate the decision to allow employees to access the company network using personal mobile devices</p> <p>Benefits</p> <ul style="list-style-type: none"> ● improved employee job satisfaction ● increased job efficiency and flexibility, may be able to work from home, be more productive when meeting clients or traveling to work ● company cost savings for initial device purchase/ongoing usage/IT helpdesk support as employees invest in their own devices ● staff will be used to the devices reducing the need for training ● staff may be able to use ‘cloud’ technologies to share data (this may cause issues with the functionality of the task) <p>Disadvantages</p> <ul style="list-style-type: none"> ● may have an additional cost to add secure wireless functionality to the current network ● company has less control over the devices compared to a device owned by the company ● must ensure they meet their Data Protection obligations to access company information ● may be introducing increased vulnerabilities into what should be a secure environment ● increase in policies and security implementations, would increase technical/administration staff workload ● files and software may not be compatible with both the mobile and desktop/laptop operating systems ● may lead to increased monitoring of employees, e.g. recording the geo-location of the personal devices or monitoring the internet traffic on the personal devices <p>Security</p> <ul style="list-style-type: none"> ● WiFi is considered less secure than an Ethernet network, because the signal can be detected by anybody in range. ● mobile devices containing work/sensitive data may get lost or stolen more easily than desktops. ● exposed to wider threat of viruses, etc. when accessing different networks ● reliance on employees to secure devices (which also relies on OEM security) ● there are ways to secure devices, e.g. encryption of drives on mobile devices, using VPN to ensure a secure connection to the work server and/or implementing policies to ensure workers limit their exposure to open networks ● the use of a sandbox (a security mechanism for separating running

programs)

- ring-fencing of data, such as by keeping data contained within a specific app
- procedures must be established for loss/theft of a digital device, e.g. how the data on it is kept confidential and retained via a backup facility

Employee responsibilities

Employee must:

- ensure that work data will not be merged with personal data
- that non-employees, such as family members who use the device, do not access work data
- only process corporate personal data for corporate purposes
- take adequate care to minimise the loss/theft of the devices

A BYOD business policy should be established following UK Information Commissioner's Office (ICO) guidelines including:

- compliance with the Data Protection Act 1998 (losing employee or client data could result in a breach of the act, leaving the company vulnerable to legal claims or a fine imposed by the ICO)
- establishing employee responsibilities
- establishing which type of corporate data can be processed on personal devices
- how to encrypt and secure access to the corporate data
- how the corporate data should be stored on the personal devices
- how and when the corporate data should be deleted from the personal devices
- how the data should be transferred from the personal device to the company servers

Mark scheme (award up to 12 marks) refer to the guidance on the cover of this document for how to apply levels-based mark schemes*.

Mark	Descriptor
0	No rewardable material.
1-4	<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 issues to the scenario.</p> <p>No conclusion is presented or is generic.</p>
5-8	<p>Accurate technical vocabulary is used to support arguments, but not all 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 upon their relative importance to the given scenario.</p> <p>An attempt at a conclusion is presented that links arguments to the given scenario but is not justified in that it does not reflect the careful consideration of both sides of the argument.</p>
9-12	<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>A fully justified conclusion is presented that links arguments to the given scenario and that reflects the careful consideration of both sides of the argument leading to a reasoned decision.</p>

Ofqual



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