



# Mark Scheme (Results)

January 2021

Pearson BTEC Nationals  
In Information Technology (31760H)  
Unit 1: Information Technology Systems

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# Unit 1: Information Technology Systems

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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- All marks on the mark scheme should be used appropriately.
- All marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if a candidate's response is not worthy of credit according to the mark scheme.
- Where some judgment is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt about applying the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed-out work should be marked UNLESS the candidate has replaced it with an alternative response.
- Phonetic spelling should be accepted.

## Specific marking guidance

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- 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 <b>one</b> mark for each benefit up to a maximum of <b>two</b> marks:</p> <p>Signals are stable / reliable (1)            Signals do not diminish over distance (1)            Signals are not subject to interference (from objects such as walls / other wireless devices) (1)            (Usually) have greater bandwidth than wireless connections (1)            More secure than wireless connections / Less risk of hackers (1)            Faster transmission speeds (uploading / downloading speeds) (1)</p> <p><b>Do Not Award</b>            'costs relating to installing cabling'</p> <p><b>Additional Guidance</b>            Award a mark for 'Safer' as long it is obvious, they are referring to security.            Accept any other valid response</p>	2

Question Number	Answer	Mark
1b	<p>Award <b>one</b> mark for each benefit up to a maximum of <b>two</b> marks:</p> <p>Easier to connect/ give access to guest users/ <b>larger</b> number of users/devices can connect (1)            Portability/ signal is available anywhere (within range of router) (1)            No risks caused by trailing wires (1)            No additional wires/ cabling (1)</p> <p><b>Do Not Award</b>            'no wires' on its own            Accept any other valid response</p>	2

Question Number	Answer	Mark
1ci	<p>Award up to <b>two</b> marks for a linked explanation, such as:</p> <p>A faster connection speed via PAN connection (1) because fewer users sharing the bandwidth/connection (1)</p> <p>Improved security (1) because it uses secure cellular data connection / train connection will be public/prone to vulnerabilities network (1)</p> <p>Will be able to set system to download what she needs i.e. pay up front for cellular data (1) because she is unlikely to be able to download large files across a public / shared network (1)</p> <p>Automatic synchronise data (downloads / uploads) (1) so that this can be done between many devices at the same time (1)</p> <p>Portability (1) so that she can establish a connection wherever / whenever (1)</p> <p>No extra cables needed (1) because she can connect through the use of Bluetooth (1)</p> <p>Do not accept 'Safe' for 'Secure'</p> <p>Accept any other valid response</p>	2

Question Number	Answer	Mark
1cii	<p>Award up to <b>two</b> marks for a linked explanation, such as:</p> <p>Cost implications of using cellular data (1) because she may run out of data &amp; have to 'top up' which can be expensive (1)</p> <p>Uses cellular data allowance (1) which will use up data available for other activities (1)</p> <p>Limited signal range (1) because she is confined to maximum 10 meters / if devices are further away from each other (1)</p> <p>Data can drop out/ Unstable connection (1) because there can be interference with radio signals/ going through blackspots (1)</p> <p>Slow data transfer (1) which can cause problems when downloading larger files (1)</p> <p>Battery used up quickly (on mobile devices) (1) so Jacky would not be able to connect to the Internet (1)</p> <p>Accept any other valid response</p>	2

Question Number	Answer	Mark
1ciii	<p>Award <b>one</b> mark for each description up to a maximum of <b>four</b> marks:</p> <p><b>Bluetooth</b>            Turn on Bluetooth (1)            Jacky would need to allow new connections (1)            The friend needs to search for/find the device/ network (1)            Pair devices/ enter code (1)            Jacky would need to accept the pairing (1)</p> <p><b>Wi-Fi</b>            Jacky needs to turn on wireless (1)            Allow others to join/ share connection (1)            The friend needs to search for/find the device/ network (1)            Jacky needs to tell the friend the password (1)            The friend needs to enter the password (1)            The friend needs to 'join' the network (1)</p> <p>Might get pairing / connect included in the responses</p> <p><b>Do Not Accept</b> responses relating to Jacky setting up the PAN</p> <p>Accept any other valid response</p>	4

Question Number	Answer	Mark
1d	<p>Award up to <b>two</b> marks for each of <b>two</b> linked explanations, such as:</p> <p><b>Disk clean-up</b> – designed to free up disk space/ increase performance (1) by removing unnecessary files/ programs (temporary files, cached webpages, items in Recycle bin) (1)</p> <p><b>Software firewall</b> - ensure security (1) by stopping/ monitoring incoming and outgoing traffic (1)</p> <p>Accept any other valid response</p>	4

Question Number	Indicative content
1e	<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 the indicative content but should be rewarded for other relevant answers.</p> <p>Learners <b>discuss</b> the implications of installing open source rather than proprietary software.</p> <p><u>User experience</u></p> <ul style="list-style-type: none"> <li>• similarities/differences between existing software and new software. the interfaces and functions of the software likely to be different and could cause problems for Jacky.</li> <li>• differences are likely to be greater with open source rather than upgrading to same type of proprietary software.</li> <li>• there may not be as many features included with open source, which may make it difficult to carry out specific tasks / tasks she currently does in a particular way</li> <li>• training on open-source software may be difficult to find</li> <li>• can report bugs so the community can release patches as soon as possible.</li> </ul> <p><u>Compatibility</u></p> <ul style="list-style-type: none"> <li>• will the open source software be compatible with existing operating systems/hardware? Likely that just upgrading proprietary software wouldn't cause (as many) issues.</li> <li>• may have to find ways of making the new software work on/with current systems, which can be time-consuming, or require additional support.</li> <li>• compatibility of document formats – sharing files with others may be difficult, if they are not saved using portable formats. Documents sent by others may be saved in proprietary formats, making it difficult to access work, which may affect files generated by the college.</li> </ul> <p><u>Cost</u></p> <ul style="list-style-type: none"> <li>• purchase cost of open source is generally free or very cheap</li> <li>• community support for open source is usually cost free whereas proprietary support can be expensive</li> </ul> <p><u>Support</u></p> <ul style="list-style-type: none"> <li>• open source software is often created and maintained by a community rather than by a company, support and development may be sporadic or stop/change without providing support for existing versions</li> <li>• proprietary software usually comes with a variety of training facilities/support</li> </ul> <p><u>Customisation</u></p> <ul style="list-style-type: none"> <li>• open source software provides access to the source code, which provides scope for the user to set it up to fully meets needs.</li> <li>• vulnerable to malicious users who can view and exploit vulnerabilities if software not updated regularly</li> </ul>

<p><b>Mark scheme (award up to 8 marks)</b> refer to the guidance on the cover of this document for how to apply levels-based mark schemes*.</p>		
<b>Level</b>	<b>Mark</b>	<b>Descriptor</b>
Level 0	0	No rewardable material.
Level 1	1-3	<ul style="list-style-type: none"> <li>• Demonstrates isolated elements of knowledge and understanding</li> <li>• There will be major gaps or omissions</li> <li>• Few of the points made will be relevant to the context in the question</li> <li>• Limited discussion which contains generic points</li> <li>• Little or no consideration of different aspects</li> </ul>
Level 2	4-6	<ul style="list-style-type: none"> <li>• Demonstrates some accurate knowledge and understanding</li> <li>• There will be some gaps or omissions</li> <li>• Some of the points made will be relevant to the context in the question, but the link will not always be clear</li> <li>• Displays a partially developed discussion which considers some different aspects</li> <li>• There will be some consideration of how they interrelate</li> </ul>
Level 3	7-8	<ul style="list-style-type: none"> <li>• Demonstrates mostly accurate and detailed knowledge and understanding</li> <li>• There will be minor gaps or omissions</li> <li>• Most of the points made will be relevant to the context in the question, and there will be clear links</li> <li>• Displays a well-developed and logical discussion which clearly considers a range of different aspects</li> <li>• Clearly shows how they interrelate</li> </ul>



Question Number	Answer	Mark
2a	<p>Award <b>one</b> mark for identification and <b>one</b> additional mark for appropriate expansion.</p> <p>Provides a method for a user to communicate/interact/navigate with the computer system / hardware &amp; software (1)  in order to carry out tasks/ control the computer/ device (1)  using icons/menus / entering commands (1)</p> <p>Provides a user-friendly method (1) for the user to interact with the system (1)</p> <p>Accept any other valid response</p>	2

Question Number	Answer	Mark
2b	<p>Award <b>one</b> mark for identification and <b>one</b> additional mark for appropriate expansion.</p> <p>More intuitive/can be easier to learn/use (1) because they are recognising icons/don't have to learn complicated code/commands (1)</p> <p>Commands do not have to be typed (1) which can lead to errors/is time consuming (1)</p> <p>Provide users with immediate visual feedback (1) by moving to the correct/incorrect part of the menu/error message (1)</p> <p>Allows multiple programs and/or instances to be displayed simultaneously (1) which increase efficiency (1)</p> <p>Multi-tasking (1) which enables users to view / toggle between multiple programs / documents at the same time (1)</p> <p>Easier to customise/ modify (1) to make it more accessible for users (1)</p> <p>Accept any other valid response</p>	4

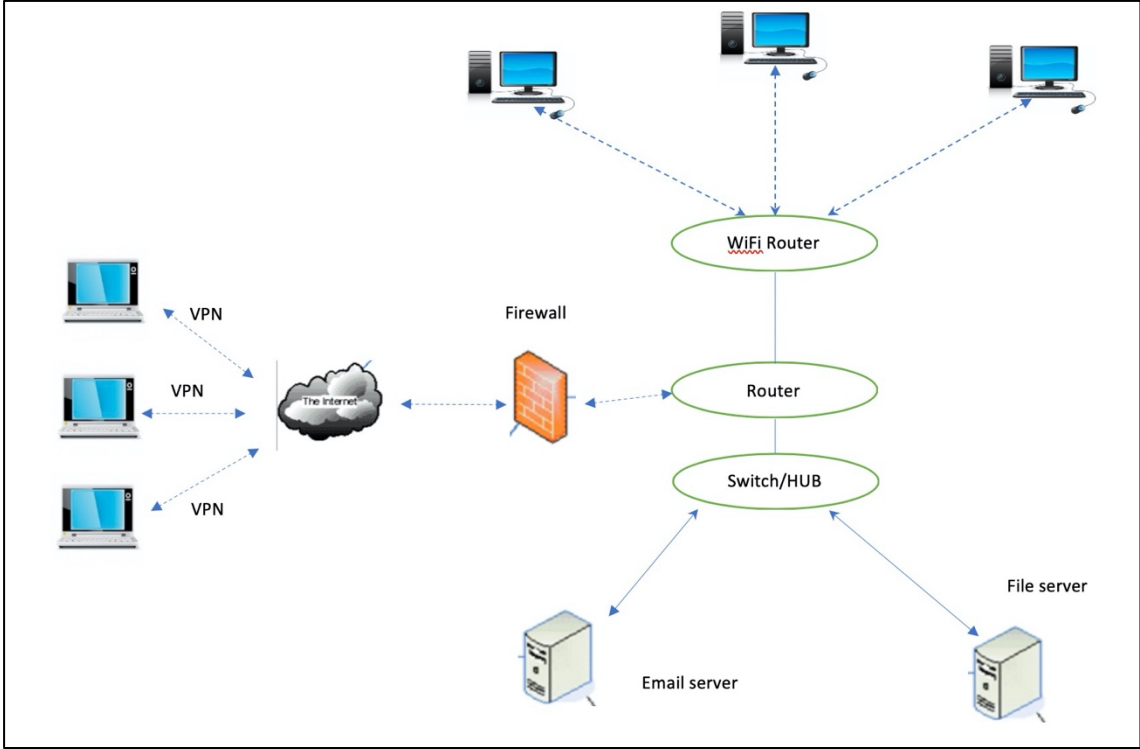
Question Number	Answer	Mark
2c	<p>Award <b>one</b> mark for identification and <b>one</b> additional mark for appropriate expansion.</p> <p>Employees would not need extra training (1) because they are likely to be familiar with this OS (1)</p> <p>Improve productivity/efficiency (1) because the user runs multiple applications /perform multiple tasks <b>simultaneously</b> (1)</p> <p>Only one user would need to access the PC <b>at any one time</b> (1) as employees would have their work stored locally on their HDD (1)</p> <p>No additional costs (1) because it is the standard OS that comes with each PC / laptop (1)</p> <p>Accept any other valid response</p>	4

Question Number	Answer	Mark
2di	<p>Award <b>one</b> mark for identification and <b>one</b> additional mark for appropriate expansion.</p> <p>Computer theft (1) because someone could break into the office and walk away with the PC (1)</p> <p>Malicious damage (1) by someone deleting or editing malicious data on purpose (1)</p> <p>introducing viruses/malware (1) via an external device (1)</p> <p>Accidental damage (1) employee could spill drink and ruin the hard disk drive / power surge leading to computer crashing / overwriting/ deleting files (1)</p> <p>Hardware/ system failure/ damage (1) HDD could encounter problems and employees may not be able to access data (1)</p> <p>Natural disaster (1) caused by fire/ floods/ etc</p> <p>Accept <b>Data loss</b> once only. Only award 1 mark per expansion and identification if the same.</p> <p>Accept any other valid response</p>	4

Question Number	Indicative content
2dii	<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 <b>discuss</b> how moving to a cloud storage system would impact Miguel and the programmers.</p> <p><b>Positive impacts</b></p> <p>The data would be held in a central storage area, accessible by all of the computers/users.</p> <p>Programmers/Miguel:</p> <ul style="list-style-type: none"> <li>• may be able to access/share each other's files/designs to offer advice and help to each other</li> <li>• access their own files from different devices if needed.</li> <li>• synchronise across all devices being used when updates are made</li> <li>• beneficial to Miguel as he visits clients/uses a laptop &amp; PC</li> <li>• may be able to introduce flexibility of working from home/remotely for all programmers</li> <li>• can access files in the event of hard drive failure</li> </ul> <p>The business would benefit as:</p> <ul style="list-style-type: none"> <li>• productivity would increase when file sharing</li> <li>• may be able to allow some working from home leading to a reduction in office overheads</li> <li>• costs because there would be no need to purchase expensive hardware, software licences and updates, IT technicians to maintain the system.</li> <li>• scalable storage to suit needs</li> </ul> <p><b>Negative impacts</b></p> <p>Increased reliance on internet</p> <p>Increased security risks:</p> <ul style="list-style-type: none"> <li>• transmission of data via the internet makes it more vulnerable to attack hacking/virus etc</li> <li>• introduction of a 'third party' may potentially increase risks</li> </ul> <p>May need to train staff in:</p> <ul style="list-style-type: none"> <li>• new working practices e.g. saving / sharing data</li> <li>• new threats to data/security and how to avoid/overcome them</li> </ul> <p>Cost:</p> <ul style="list-style-type: none"> <li>• payment for cloud storage</li> <li>• user support initial &amp; ongoing</li> <li>• training</li> </ul>

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Level	Mark	Descriptor
Level 0	0	No rewardable material.
Level 1	1-2	<ul style="list-style-type: none"> <li>• Demonstrates isolated elements of knowledge and understanding</li> <li>• There will be major gaps or omissions</li> <li>• Few of the points made will be relevant to the context in the question</li> <li>• Limited discussion which contains generic points</li> <li>• Little or no consideration of different aspects</li> </ul>
Level 2	3-4	<ul style="list-style-type: none"> <li>• Demonstrates some accurate knowledge and understanding</li> <li>• There will be some gaps or omissions</li> <li>• Some of the points made will be relevant to the context in the question, but the link will not always be clear</li> <li>• Displays a partially developed discussion which considers some different aspects</li> <li>• There will be some consideration of how they interrelate</li> </ul>
Level 3	5-6	<ul style="list-style-type: none"> <li>• Demonstrates mostly accurate and detailed knowledge and understanding</li> <li>• There will be minor gaps or omissions</li> <li>• Most of the points made will be relevant to the context in the question, and there will be clear links</li> <li>• Displays a well-developed and logical discussion which clearly considers a range of different aspects</li> <li>• Clearly shows how they interrelate</li> </ul>

Question Number	Indicative content
3a	<p>A diagram of a potential system/ integration of IT systems and connections used to meet the requirements of the scenario i.e. the SchFurn system.</p>  <p>Example response – note this is indicative only. Credit should be given for a diagram that meets the requirements of the given problem.</p> <p>Diagram may include:</p> <p><b>Devices:</b></p> <p>In Company Office;</p> <ul style="list-style-type: none"> <li>• 3 admin computers</li> <li>• WiFi router</li> <li>• Router</li> <li>• Switch/hub</li> <li>• File server</li> <li>• Email server</li> <li>• Firewall</li> </ul> <p>Remote:</p> <ul style="list-style-type: none"> <li>• 3 sales Laptops</li> </ul> <p><b>Connection types to be used</b></p> <ul style="list-style-type: none"> <li>• Admin computers to WiFi router – wireless</li> <li>• WiFi router to router to switch/hub to servers - wired</li> </ul> <p><b>Data flow:</b></p> <p>Two way between devices</p>

Level	Descriptor
0 marks	No rewardable material
1-2 marks	<p>Diagram provides partial coverage of devices.</p> <p>Limited connections are shown</p> <p>Diagram includes some annotations of the connection types used.</p>
3-4 marks	<p>Diagram provides coverage of mostly appropriate devices.</p> <p>Connections are shown which meet <b>most</b> requirements of the scenario.</p> <p>Diagram includes some annotations of connection types used to meet the majority of the requirements of the scenario, but these may not always be the most efficient.</p>
5-6 marks	<p>Diagram provides <b>thorough</b> coverage of appropriate device which fully meet the requirements of the scenario.</p> <p>Connection are shown which <b>fully</b> meet the requirements of the scenario.</p> <p>Diagram includes detailed and <b>accurate</b> annotations of devices and connection types used to meet the requirements of the scenario.</p>

Question Number	Answer	Mark
3bi	<p>Award <b>one</b> mark for each description up to a maximum of <b>four</b> marks.</p> <ul style="list-style-type: none"> <li>• Uses algorithms (1)</li> <li>• The codec digitises an analogue signal/ encodes (1)</li> <li>• This is compressed (1)</li> <li>• Splits into internet packets (1)</li> <li>• These are transmitted/transferred (1)</li> <li>• When received they are uncompressed (1)</li> <li>• decodes (1)</li> <li>• User and receiver need to have the same codec (1)</li> <li>• Determines quality (1)</li> <li>• Encrypting for security (1)</li> </ul> <p>Accept any other valid response.</p>	4

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 should be rewarded for other relevant answers.</p> <p>Learners <b>discuss</b> the implications to SchFurn of using a VPN to allow the sales staff to work remotely.</p> <p>The company should have policies set in place to guide staff and also monitor adherence to the policies for remote working and access to systems and data.</p> <p>Remote workers must adhere to the company’s IT policy, e.g. limit activities to ones that can be carried out remotely, working in public places.</p> <p>VPNs need to be kept up to date to ensure data is kept secure and private using encryption.</p> <p>Advantages:</p> <ul style="list-style-type: none"> <li>• a VPN is protected by encryption and security to help keep data private and secure, even when using a non-secure/open network which will prevent unauthorised access to his laptop</li> <li>• a VPN allows secure remote online connection anywhere / anytime, giving greater flexibility</li> <li>• can use public/shared networks securely, which could save money compared to paying for high-speed mobile data connections</li> <li>• a VPN ensures security of data by restricting access to only authorised users, by giving individual usernames and passwords</li> </ul> <p>Disadvantages:</p> <ul style="list-style-type: none"> <li>• There could be a decrease in internet connection because it is rerouted and encrypted via a VPN server</li> <li>• The remote worker might need to install client software on their device(s) - training required</li> <li>• Some VPN providers are not legitimate and might sell data / not trustworthy</li> <li>• Connections could drop out</li> <li>• Cost implications</li> <li>• Training implications</li> </ul> <p>Accept any other valid response.</p>



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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 should be rewarded for other relevant answers.</p> <p>Learners <b>discuss</b> relevant legislation that protects this data including the company and employee responsibilities.</p> <p><b>Computer Misuse Act 1990</b> The company must make sure procedures are in place to:</p> <ul style="list-style-type: none"> <li>• stop unauthorised access to their computer system/designs/data</li> <li>• stop (hackers) intent on committing a further crime by stealing/modifying/deleting data or introducing malware/spyware</li> <li>• failure to comply can lead to fines/penalties depending on the offence</li> </ul> <p>Employees must follow company policies to make sure</p> <ul style="list-style-type: none"> <li>• they adhere to strict rules on the use of company emails</li> <li>• follow guidelines on the use of company/personal social media</li> </ul> <p><b>Data Protection Act 1998 / Data Protection Act 2018</b> (incorporating the GDPR)</p> <p><b>Company responsibilities</b> should be established following UK Information Commissioner's Office (ICO) guidelines including:</p> <ul style="list-style-type: none"> <li>• nominating a <b>data controller</b> for the company who will determine what data to collect and how it is processed</li> <li>• applying for permission with the <b>Information Commissioner</b> to store/use personal data</li> <li>• declaring to the Information Commissioner the information that will be stored and how it will be used (personal or sensitive)</li> <li>• abiding to the eight principles of data protection</li> <li>• compliance with the Data Protection Act 1988 (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)</li> <li>• establishing employee responsibilities</li> <li>• establishing which type of corporate data can be processed on portable devices</li> <li>• how to encrypt and secure access to the corporate data</li> <li>• how the corporate data should be stored on portable devices</li> <li>• how and when the corporate data should be deleted from the portable devices</li> <li>• how the data should be transferred from the portable device to the company servers</li> </ul> <p><b>Employee responsibilities:</b></p> <ul style="list-style-type: none"> <li>• ensure that work data will not be merged with personal data</li> <li>• ensure that non-employees, such as family members who use the portable device, do not access work data</li> <li>• only process corporate personal data for corporate purposes</li> <li>• take adequate care to minimise the loss/theft of the devices</li> </ul>

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Level 3	7-8	<ul style="list-style-type: none"> <li>• Demonstrates mostly accurate and detailed knowledge and understanding</li> <li>• There will be minor gaps or omissions</li> <li>• Most of the points made will be relevant to the context in the question, and there will be clear links</li> <li>• Displays a well-developed and logical discussion which clearly considers a range of different aspects</li> <li>• Clearly shows how they interrelate</li> </ul>

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 <b>discuss</b> the threats to personal and financial data when using online banking and suggest methods that can be used to reduce the threats.</p> <p><b>Hackers/unauthorised access</b></p> <p><u>Firewall (hardware or software)</u></p> <ul style="list-style-type: none"> <li>• firewall installed on the portable device</li> <li>• kept up to date</li> </ul> <p><u>Security of Apps &amp; OS</u></p> <ul style="list-style-type: none"> <li>• Operating System security patches kept up to date</li> <li>• App security patches kept up to date</li> </ul> <p><u>Protecting data during transmission</u></p> <ul style="list-style-type: none"> <li>• don't use unsecured/public networks – may be accessible to other users</li> <li>• use secure network / cellular data / VPN – these will encrypt the data and prevent access</li> <li>• ensure that users are logging on to secure URL– HTTPS/SSL/TSL protocols. Identified by padlock/green in address bar etc</li> </ul> <p><u>Physical protection of portable device</u></p> <ul style="list-style-type: none"> <li>• use strong password / biometric controls to access portable device</li> <li>• ensure follow procedures for keeping password secure e.g. don't write it down/tell anyone / hide when entering etc</li> <li>• log off when finished using</li> <li>• don't leave portable device accessible to anyone else</li> <li>• protection of files on portable device – passwords / access levels / encryption of data</li> <li>• theft of portable device</li> </ul> <p><u>Precautions when using in public places</u></p> <ul style="list-style-type: none"> <li>• prevent shoulder surfing – ensure no one can see what data being entered/accessed</li> <li>• don't use unsecured/public networks – portable device may be visible / accessible to other users</li> </ul> <p><b>Phishing</b></p> <ul style="list-style-type: none"> <li>• don't respond to links / attachments from unknown senders</li> </ul> <p><b>Pharming</b></p> <ul style="list-style-type: none"> <li>• take care when accessing websites, particularly when redirected. – check URL, is it as expected?</li> </ul>

**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	1-4	<ul style="list-style-type: none"> <li>• Demonstrates isolated elements of knowledge and understanding</li> <li>• There will be major gaps or omissions</li> <li>• Few of the points made will be relevant to the context in the question</li> <li>• Limited discussion which contains generic points</li> <li>• Little or no consideration of different aspects</li> </ul>
Level 2	5-7	<ul style="list-style-type: none"> <li>• Demonstrates some accurate knowledge and understanding</li> <li>• There will be some gaps or omissions</li> <li>• Some of the points made will be relevant to the context in the question, but the link will not always be clear</li> <li>• Displays a partially developed discussion which considers some different aspects</li> <li>• There will be some consideration of how they interrelate</li> </ul>
Level 3	8-10	<ul style="list-style-type: none"> <li>• Demonstrates mostly accurate and detailed knowledge and understanding</li> <li>• There will be minor gaps or omissions</li> <li>• Most of the points made will be relevant to the context in the question, and there will be clear links</li> <li>• Displays a well-developed and logical discussion which clearly considers a range of different aspects</li> <li>• Clearly shows how they interrelate</li> </ul>

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 should be rewarded for other relevant answers.</p> <p>Learners analyse the implications of JKH Bank moving to online banking only. They should consider the impact on:</p> <ul style="list-style-type: none"> <li>• customers</li> <li>• bank employees</li> <li>• JKH Bank.</li> </ul> <p><b>Customers</b></p> <p>Technology:</p> <ul style="list-style-type: none"> <li>- must have technology which will allow access to banking system, including hardware, software, communication systems and internet access</li> <li>- must understand how to use the technology given above</li> <li>- lack of technology will impact on some 'groups' more than others, e.g. older people may not have the technology. – these groups will not be able to access online banking. Younger customers are likely to be happy with the change as this is the 'norm' for them.</li> </ul> <p>Some customers prefer to use a high street branch:</p> <ul style="list-style-type: none"> <li>- preferring face to face contact / human interaction</li> <li>- may need additional guidance for specific issues e.g. investment advice</li> <li>- these customers will need to find alternative banks, which could be problematic</li> </ul> <p>Current online customers will be largely unaffected, unless changes affect systems e.g. during changeover may be issues due to increased usage of systems</p> <p><b>Bank employees</b></p> <p>Branch staff:</p> <ul style="list-style-type: none"> <li>- may be made redundant /lose their jobs</li> <li>- may need to relocate to take up new roles within JKH Bank or other organisations</li> <li>- may need retraining to take new roles in the online banking</li> <li>- may be able to take up roles in e.g. customer service</li> <li>- may be unhappy about job changes / less job satisfaction from working in a customer-based environment / increased reliance on technology</li> </ul> <p>Current online staff:</p> <ul style="list-style-type: none"> <li>- may be concerned about increased workload</li> <li>- may be offered new opportunities e.g. training of new staff, more technical roles available, customer service</li> </ul>

### **JKH Bank**

#### Overall:

- savings on branches – buildings premises / overheads / hardware / staff reduction
- potential savings on connectivity / networking systems between branches
- potential for increased online customers
- may lose customers/revenue from customers who prefer/need to use in-branch banking
- costs of staff redundancy / retraining
- increased cost of additional staff to run increased online service systems
- increased cost to set up/run additional customer service facility to deal with increase in queries
- increased cost of additional systems necessary to cope with increased usage
- centralisation of all data – more manageable / may lead to fewer technical staff
- any data stored on branch systems would need to be migrated to central systems, must ensure that this is backed up.

#### Implementation:

- need to determine how the changeover will take place – will all branches close simultaneously or phased changeover.
- phased changeover will have less impact on in-branch customers who are geographically near to a branch that is not closing
- phased changeover – some staff will need to be retrained before implementation can begin, but others may be able to train alongside existing staff e.g. 'work shadowing'
- new systems will need to be in place / tested before implementation to ensure that they can cope with increased numbers
- some services such as customer services will have a high initial demand (which will probably decrease)

**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\*.

<b>Level</b>	<b>Mark</b>	<b>Descriptor</b>
Level 0	0	No rewardable material.
Level 1	1-4	<ul style="list-style-type: none"> <li>• Demonstrates isolated knowledge and understanding, there be major gaps or omissions</li> <li>• Breaks the situation down into component parts and a few of the points made will be relevant to the context in the question</li> <li>• Limited analysis which contains generic assertions rather than interrelationships or linkages</li> </ul>
Level 2	5-8	<ul style="list-style-type: none"> <li>• Demonstrates some accurate knowledge and understanding, with few minor omissions/any gaps or omissions are minor</li> <li>• Breaks the situation down into component parts and some of the points made will be relevant to the context in the question</li> <li>• Displays a partially developed analysis which considers some interrelationships or linkages but not always sustained</li> </ul>
Level 3	9-12	<ul style="list-style-type: none"> <li>• Demonstrates mostly accurate and thorough/detailed knowledge and understanding</li> <li>• Breaks the situation down into component parts and most of the points made will be relevant to the context in the question</li> <li>• Displays a well-developed and logical analysis which clearly considers interrelationships or linkages in a sustained manner</li> </ul>





Llywodraeth Cymru  
Welsh Assembly Government



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