

## **Cambridge National**



### **ICT**

Level 1/2 Cambridge National in ICT

R012/01 Understanding tools, techniques, methods and processes for technological solutions

### **Mark Scheme for Jan 2020**

9. These are the annotations, (including abbreviations), including those used in RM3, which are used when marking

Symbol	Description	Comment
	Tick	worthy of credit
	Cross	Not worthy of credit
<b>BOD</b>	BOD	Benefit of doubt
<b>L1</b>	L1	Level 1 answer
<b>L2</b>	L2	Level 2 answer
<b>L3</b>	L3	Leve 3 answer
<b>NAQ</b>	NAQ	Not answered question
<b>SEEN</b>	Seen	Answer seen
<b>TV</b>	TV	Answer not sufficiently clear
.....	Highlight	as directed by PE
<b>REP</b>	REP	conspicuous repetition

Question	Answer/Indicative content	Mark	Guidance
1	<p><b>One mark available:</b></p> <ul style="list-style-type: none"> <li>• C (1).</li> <li>• Answer as below:</li> </ul> <p>Circle one of A, B, C or D.</p> <p>A Planning Evaluation <u>Initiation</u> Execution</p> <p>B <u>Planning</u> Execution Initiation Evaluation</p> <p>C Initiation Planning <u>Execution</u> Evaluation</p> <p>D Initiation Planning <u>Evaluation</u> Execution</p>	1	Correct answer only.
2	<p><b>One mark available:</b></p> <ul style="list-style-type: none"> <li>• TRUE (1).</li> </ul>	1	Correct answer only.
3	<p>Low demand question – accept any reasonable advantage.</p> <p><b>Two marks available:</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• The cost of using consumer panels can be low//cheap/cheaper (1).</li> <li>• Response rates are high (1).</li> <li>• The data can be gathered quickly/quicker (1).</li> <li>• Feedback is direct (1)</li> <li>• More focused (on the product)/in depth/better quality (1).</li> <li>• The data collected is up-to-date/current (1)</li> <li>• Consumers can take time testing (1)</li> <li>• More people willing to take part (1)</li> <li>• Can observe real world interaction/facial expressions (1).</li> </ul>	2	<p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first two attempts at giving an advantage</b></p> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>• Can observe customer using the product.</li> <li>• Quicker/Easier (on own)</li> <li>• Data collected automatically</li> <li>• More accurate/better (TV)/effective (TV)</li> <li>• (Form of) primary research (TV)</li> <li>• Any answer about <b>use of data</b></li> </ul>

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4	<p><b>One from:</b></p> <ul style="list-style-type: none"> <li>• DPA (1).</li> <li>• GDPR (1).</li> </ul>	1	<p><b>Mark first answer given.</b></p> <p><b>Further instruction</b></p> <p><b>Accept:</b> Data Protection Act / General Data Protection Regulations/Data Protection/data protection</p> <p><b>Do not accept:</b></p> <p>Data Misuse Act</p>
5	<p>Low demand question.</p> <p>For deliverable products, accept “intended outcome” or equivalent.</p> <p><b>Two from:</b></p> <ul style="list-style-type: none"> <li>• Deliverable products/the (final) product/project deliverables/intended outcome/finished project (1).</li> <li>• Test <b>results</b>/Outcomes the project/test document/any awareness that <u>testing</u> has taken place (1).</li> <li>• <u>Phase</u>/iterative review (1).</li> </ul>	2	<p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first two attempts at giving an output</b></p>
6	<p><b>One mark available:</b></p> <p>D (1).</p>	1	<p><b>Correct answer only.</b></p> <p>If candidate answers more than once, award zero marks.</p>

Question		Answer/Indicative content	Mark	Guidance
7		<p>Low demand question. Accept any reasonable benefit for the use of social media (including prefacing the answer with “easier”)</p> <p><b>Two marks available:</b> e.g.</p> <ul style="list-style-type: none"> <li>Increases the market awareness (of its services) (1)</li> <li>Wider audience/world-wide audience/lots of people use social media(1).</li> <li>Can reach customers directly using social media (1).</li> <li>Can develop customer loyalty/increased popularity/expanded fan base (1).</li> <li>Can receive (instant) feedback/comments (1).</li> <li>Can respond directly/more quickly to enquiries/complaints (1)</li> <li>Can include links to website (1).</li> <li>Ease of access to message (1)</li> <li>It is cheap/cheaper/free (1)</li> </ul>	2	<p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first two attempts at giving a benefit.</b></p> <p>Where preamble is clearly an opening statement, ignore.</p> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>Ease/speed of use</li> <li>Improved targeting</li> <li>Speed of message dispersal</li> </ul>
8	A	<p><b>One mark available:</b></p> <ul style="list-style-type: none"> <li>Specific (1).</li> </ul>	1	<b>Correct answer only (do not penalise spelling).</b>
	B	<p><b>One mark available:</b></p> <ul style="list-style-type: none"> <li>Achievable/attainable (1).</li> </ul>	1	<b>Correct answer only (do not penalise spelling).</b>
	C	<p><b>Low demand question – answer must be taken from the scenario, but does need to be quoted verbatim.</b></p> <p><b>Two from:</b></p> <ul style="list-style-type: none"> <li><u>Unique</u> username (1).</li> <li>Password (1).</li> <li>Collect data <u>of time spent online/online game usage</u> (1).</li> <li>Monitor online usage/number of games played (1).</li> <li><u>Automatically</u> create invoices (1).</li> <li><u>Monthly</u> report (1).</li> </ul>	2	<p><b>Titles on lines are for guidance only.</b></p> <p>Mark first two attempts at giving a target</p> <p>No other possible answers.</p>
	D	<p><b>One mark available:</b></p> <p>TRUE (1).</p>	1	<b>Correct answer only.</b>

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9	<p><b>One mark available for identifying storage method and up to a further two marks for justification. Justification may be developed or may be a second, subsequent, justification (if so, mark each point made separately)</b></p> <ul style="list-style-type: none"> <li>• The Cloud (1st).... e.g. <ul style="list-style-type: none"> <li>Data is collected and stored online (1) so additional hardware is not required (1) (Either acceptable for one mark)</li> <li>Backup is done by someone else (1) so it is cheaper than maintaining your own servers (1)</li> <li>The data will be automatically backed up (1) so is better protected (1)</li> <li>Data is/can be shared (1) so employees could work (e.g.) from home (1)</li> <li>Can access data <b>across a range of different hardware</b> (1) so data can be transferred from computer to computer (1)</li> <li>High capacity storage (1) so is sufficient for PGZ needs (1)</li> <li>Scalable (1) so can increase capacity as required (1)</li> <li>...concept of footloose (e.g. <b>“available anywhere”</b>) (1)</li> <li>...concept of improved access (e.g. <b>“always available”</b>) (1)</li> </ul> </li> <li>• A physical storage device/hard drive/SSD (1st)... e.g. <ul style="list-style-type: none"> <li>Data is securely stored within PGZ (1) (where the) data is less likely to be accessed by unauthorised users/hackers (1). (either acceptable for one mark)</li> <li>High capacity storage (1) so is sufficient for PGZ needs/a lot of data can be stored (1)</li> <li>read/writeable (1) so data can be modified (1)</li> </ul> </li> </ul>	3	<p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first storage method given. <u>Read whole answer for justification.</u></b></p> <p><b>Where no mark awarded for method, no further marks can be given, but read whole answer to ensure that correct answer has not been stated in the justification section</b></p> <p>Where a candidate suggests a physical device answers are restricted to <b>hard drive/SSD</b> (physical storage device on its own is acceptable).</p> <p>Award <b>any</b> suitable justification <b>other than cost</b></p> <p><b>Do not accept</b></p> <ul style="list-style-type: none"> <li>• “Quick/easy to upload files” (TV)</li> </ul> <p>NB “Quick/easy to upload files <u>from anywhere</u>” is correct</p>
10	<p>Answer must be HOW a password and username achieve reduce <b>vulnerability</b>, not simply stating that security has been addressed. Any understanding that a <b>password</b> protects the account is worthy of one mark.</p> <p>Answer is basically in the format:</p> <ul style="list-style-type: none"> <li>• Reduced access + Expansion</li> </ul> <p><b>Two marks available for a description:</b></p>	2	<p><b>Read whole answer</b></p> <p>Where candidate gives a preamble that is clearly intended to be an introduction to the answer and is not the answer, do not treat this as an attempt at the question.</p> <p>N.B. Be aware of colloquialisms and <b>award in the spirit of the answer</b> (for example, “Not anyone would be able to get on” is acceptable)</p>

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	<ul style="list-style-type: none"> <li>• Any concept of password being a form of protection (1) leading to restriction of access (1)</li> <li>• e.g.</li> <li>• Password required to get on (1) so access is restricted//and only given to trusted people (1)</li> <li>• Recognised/authorised users can get onto the account (1) others cannot (1).</li> <li>• Passwords are used to restrict usage (1) to the allowed services for that user (1).</li> <li>• Password and username combination is unique (1) so reduced chance of accessing other peoples' accounts (1)</li> </ul>		
11	<p><b>Indicative content = advantages and disadvantages of using an integrated document for presenting the information</b></p> <p><b>Advantages of using an integrated document:</b> e.g.</p> <ul style="list-style-type: none"> <li>• The data will be live and current.</li> <li>• Data will be automatically updated.</li> <li>• Reduces the time required to create the document because the data is integrated from other sources.</li> </ul> <p><b>Disadvantages of using an integrated document:</b> e.g.</p> <ul style="list-style-type: none"> <li>• The documents require a 'live' connection.</li> <li>• There maybe be compatibility issues between applications.</li> <li>• Information overload – too much information may be confusing for the viewer.</li> </ul> <p><b>Do not award:</b></p> <ul style="list-style-type: none"> <li>• Training is required to produce the document.</li> <li>• It takes time to produce the document.</li> <li>• Requires specialist software.</li> <li>• Expensive.</li> </ul>	10	<p><b>Band 3: [7-10 marks]</b> Learner <b>explains</b> the advantages (plural) AND disadvantages (plural) of using an integrated document for presenting the information. Relevant and appropriate contexts are provided to support narrative.</p> <p>Specialist terms will be used correctly and appropriately.</p> <p><i>Any relevant explanation of an advantage or disadvantage is sufficient for bottom of mark band.</i></p> <p><b>Band 2: [4-6 marks]</b> Learner <b>describes</b> the advantages AND disadvantages of using an integrated document for presenting the information. Some relevant contexts are provided although opportunities will be missed to link these into the narrative.</p> <p>Specialist terms will be used appropriately and for the most part correctly.</p>

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				<p><i>For full marks in this band, at least one advantage and at least one disadvantage should be described.</i></p> <p><i>Any relevant description of an advantage or disadvantage is sufficient for bottom of mark band.</i></p> <p><b>Band 1: [1-3 marks]</b> Learner has <b>identified</b> points relevant to the use of an integrated document for presenting the information. There will be little, if any, use of specialist terms.</p> <p><b>0 marks</b> - No response worthy of credit.</p>
12	A	<p><b>Low demand question, but answer must be in context of the question and so should be relevant for a database to store customer details as listed in the scenario.</b></p> <p><b>Three from:</b></p> <ul style="list-style-type: none"> <li>• Autonumber(1)</li> <li>• (Short) Text (1).</li> <li>• Memo (1)</li> <li>• Alphanumeric (1).</li> <li>• Numeric/number/integer (1).</li> <li>• Date (1).</li> <li>• Time (1). <span style="border: 1px solid black; padding: 2px;">Date/time may be combined for 2 marks</span></li> </ul> <ul style="list-style-type: none"> <li>• (OLE) Object (1).</li> <li>• Logical or example (1).</li> <li>• Boolean or example (1).</li> </ul>	3	<p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first three attempts at data types given.</b></p> <p>Where candidates put two from the same mark point on the same line count as one attempt.</p> <p>Boolean examples could include Yes/No, True/False, Male/Female.</p> <p>Logical examples could include 0/1, On/Off.</p> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>• Currency (not collected in this scenario)</li> <li>• Real (not collected in this scenario)</li> </ul>



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B	<p><b>Low to medium demand question. Answer stated must be a feature that is unique to databases, but once candidate has appreciated this, answer should be a statement about a feature and why this feature makes database software appropriate.</b></p> <p><b>Two from:</b></p> <ul style="list-style-type: none"> <li>• (The database) uses queries (1st) which will find data based on criteria (accept statement of criteria – “live in certain areas”)//allow for better data interrogation (1).</li> <li>• (Allows) complex queries/e.g. parameter queries (1st) which can be updated easily to reflect a new search term / allows for greater user control/flexibility (1).</li> <li>• (Allows) cross tab query (1st) allows for effective summary of data (1).</li> <li>• (Databases can enforce) relationships between tables (1st) which results in more effective queries (1).</li> <li>• Database queries can be stored (1st) for future use (1).</li> <li>• Reports can be stored (1st) for future use/for ease of reporting (1).</li> <li>• Database stores data in tables (1st) so data better organized (NOT “shown clearly”)(1)</li> <li>• Each record has a primary key (1st) so each record is unique (1)</li> </ul> <p><b>NB “Tables” may not be awarded on own (TV); marks may only be awarded where subsequent justification of tables is database specific</b></p> <ul style="list-style-type: none"> <li>• Improved data validation/data integrity (1st) therefore the data is more reliable/useable/correct type (<u>not ‘more accurate’</u>, not “more valid (if validation given as first answer)) (1) (reversible).</li> <li>• Forms may be used for data entry (1st) making the process more user friendly//less likely to enter data in wrong field (1)</li> </ul>	4	<p><b>Numbers on lines are for guidance only.</b></p> <p><b>Mark first two reasons/attempts given.</b></p> <p>Feature must be stated before mark may be given</p> <p>Answer <b>MUST</b> focus on features that are present in database software but <b>NOT</b> present in spreadsheet software</p> <p>Allow one mark for any mention of queries.</p> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>• User may not understand the software.</li> <li>• User may not own the software.</li> <li>• Use of filters.</li> <li>• Holds more data</li> <li>• Password protected</li> </ul>
C	<p><b>Initial identification of drawback is a low demand question and may be answered with a simple statement. Description of that drawback is also low demand. However, the answer <b>MUST</b> be a description of the problem, and not an explanation of the cause or a redefinition of the exact nature of the incorrect data.</b></p> <p><b>Drawbacks restricted to those given here.</b></p> <p><b>Two marks for each drawback described:</b></p>	4	<p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first two drawbacks given. For description, read whole answer. NB be aware that candidates may describe drawback 1 in second description section.</b></p> <p>Where candidate gives a preamble that is clearly intended to be an introduction to the</p>

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	<p><b>ONE OF THE FOLLOWING</b></p> <ul style="list-style-type: none"> <li>• GiGo// The taxi driver will receive the wrong instructions (1st) ... e.g.                             <ul style="list-style-type: none"> <li>...and will go to wrong address/example thereof (1)</li> <li>...providing bad customer service (1)</li> <li>...loss of reputation (1).</li> </ul> </li> <li>• Taxi will go to wrong address (1<sup>st</sup>)... e.g.                             <ul style="list-style-type: none"> <li>...providing bad customer service (1)</li> <li>...loss of reputation (1)</li> <li>...may go out of business (1)</li> </ul> </li> <li>• Marketing goes to wrong address(1<sup>st</sup>)... ...loss of potential income (1)</li> </ul> <p><b>ONE OF THE FOLLOWING</b></p> <ul style="list-style-type: none"> <li>• Unable to contact customer (1<sup>st</sup>)... e.g.                             <ul style="list-style-type: none"> <li>...to check booking details/example thereof(1)</li> </ul> </li> <li>• Will ring the wrong number (1<sup>st</sup>)... e.g.                             <ul style="list-style-type: none"> <li>...unable to confirm details (1)</li> </ul> </li> </ul> <p><b>ANY OF THE FOLLOWING</b></p> <ul style="list-style-type: none"> <li>• Taxis make wasted journeys (1st)... e.g.                             <ul style="list-style-type: none"> <li>...waste/costing the company money (1)</li> <li>...fewer drivers available <b>to work on other work</b> (1).</li> </ul> </li> <li>• Bookings are not reliably fulfilled (1st)... e.g.                             <ul style="list-style-type: none"> <li>...leading to a loss of customer confidence (1)</li> <li>...reduction in bookings (1).</li> </ul> </li> <li>• Pick up times incorrect (1<sup>st</sup>)... e.g.                             <ul style="list-style-type: none"> <li>...suitable expansion (may be from those given above) (1)</li> </ul> </li> <li>• Data protection act broken (1st)... e.g.                             <ul style="list-style-type: none"> <li>...legal action taken (1)</li> </ul> </li> </ul>		<p>answer and is not the answer, do not treat this as an attempt at the question.</p> <p>Consider individual drivers and taxi company as the same entity.</p> <p>First part of answer should focus on a commercial impact on the business. Impact should be the immediate impact, and not the implication. This may then be developed or exemplified. Accept any reasonable development or exemplification</p> <p><b>Be aware that the expansions represent acceptable answers and are not an exhaustive list. Expansions from one bullet may be used as expansions for other bullets, where they are suitable.</b></p> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>• Data held is inaccurate (TV)</li> </ul>

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	<ul style="list-style-type: none"> <li>• Need to amend the information held (1st)... e.g. ...time wasted (1)</li> <li>• Lose income (1<sup>st</sup>)... e.g. ...updating information rather than driving (1) ...marketing sent to wrong address (1)</li> <li>• Cant find customer <b>on database</b> (1<sup>st</sup>)... e.g. ...so duplicate entries (on database) (1)</li> </ul>		
13	<p><b>Low demand question – each answer is an identification only. Answer must allow review of effectiveness of the app</b></p> <p><b>Answer must be about the booking process (customer raising the order through to PT receiving the booking), but could be any reasonable success criteria.</b></p> <p><b>Two marks available:</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• Does the app work? (candidate may be more specific) (1)</li> <li>• Are there/How many customers are using the app (1).</li> <li>• Are there/How many <b>bookings</b> have been made (1).</li> <li>• Are there/How many/often bookings were successfully received by PT//conversion rate (1).</li> <li>• Time taken to complete booking (1)</li> <li>• Ease/convenience of <b>use</b> (by customer)/efficiency (1)</li> <li>• Review the customer ratings of the app (1).</li> <li>• Number of downloads (1).</li> <li>• Positive feedback on social media (or examples of) (1).</li> </ul>	2	<p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first two success criteria given.</b></p> <p><b>Further instruction</b></p> <p>Only award “does it work” answer (or example of) once.</p> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>• Ease for <u>taxi drivers</u> to use</li> <li>• How long it took for taxi to arrive/did taxi arrive</li> </ul>
14	<p><b>Two marks available:</b></p> <ul style="list-style-type: none"> <li>• Execution (1).</li> <li>• Evaluation (1).</li> </ul>	2	<p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first two attempts at answer.</b></p> <p><b>Correct answers only</b></p>

Question		Answer/Indicative content	Mark	Guidance
15	A	<p><b>The initial consequence is a low demand question, so accept any reasonable consequence that could be an outcome of the cyber-security attack. <u>Accept “phone will be attacked” and “phone will be attacked” as equivalent correct answers for 1<sup>st</sup> mark.</u></b></p> <p><b>The description is a low to mid demand question. This may be a developed point, or two individual points made.</b></p> <p><b>Each answer presented here could be given in a different order, so be prepared to award each comment here as an initial consequence</b></p> <p><b>One for available for identifying consequence and up to a further two marks for description:</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• Customers could receive a virus from the app (1st)...</li> </ul> <p>e.g.</p> <ul style="list-style-type: none"> <li>• ....which could corrupt the customers' files (1) and their data would be lost (1). Hackers could get access to customer phone/device (1<sup>st</sup>)...</li> </ul> <p>e.g.</p> <ul style="list-style-type: none"> <li>• ...by using a virus (1) ...and obtain personal information/example of information (1) ...and take control of phone (1)</li> <li>• Hackers could get unauthorised access to (personal) information/example of information//information can be leaked to internet/3<sup>rd</sup> party (1st)....</li> </ul> <p>e.g.</p> <ul style="list-style-type: none"> <li>• ...which could be used (for (e.g.) identity theft) (1) plus any suitable consequence (1). ...such as your (e.g.) address (1) ...which would put customer in danger (1)</li> <li>• Financial loss (1<sup>st</sup>)...</li> </ul> <p>e.g.</p> <ul style="list-style-type: none"> <li>• ...as personal data is taken (1) and can be used to buy stuff (1)</li> <li>• Booking may not reach Pro-Taxis/server shut down (etc) (1st)...</li> </ul> <p>e.g.</p> <ul style="list-style-type: none"> <li>• ...so customer is left waiting for a taxi (1) that is not going to arrive/other consequence of taxi not arriving (1).</li> </ul>	<b>3</b>	<p>Do not award answers based on the use of the Public Wireless Network.</p> <p>Answer must be an impact on the customer and must fit the scenario.</p> <p>Description given must match the 1<sup>st</sup> consequence given and must fit other restrictions of the question.</p> <p><b>Be aware that the expansions represent acceptable answers and are not an exhaustive list. Expansions from one bullet may be used as expansions for other bullets, where they are suitable.</b></p>

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	<ul style="list-style-type: none"> <li>• Taxi does not arrive (1<sup>st</sup>)... e.g. ...so customer misses (e.g.) appointment (1) plus reasonable implication (1)</li> <li>• Customer has to pay more for taxi ride (1<sup>st</sup>)... ...hacker could manipulate the data (1) by changing prices (1)</li> </ul>		
B	<p><b>Initial action is a low demand question, so accept any <u>generic</u> action that will reduce the risk of a cyber-security attack, other than those that suggest not using a public wireless network or use of VPN etc.</b></p> <p><b>Justification may be why taking an action reduces the risk (such as install anti-virus software) or why NOT taking an action reduces the risk.</b></p> <p><b>Justification may be developed or may be a second, subsequent, justification (if so, mark each point made separately)</b></p> <p><b>One mark available for identifying action customers could take and up to a further two marks for justification:</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• Install virus protection//use a protection app (1<sup>st</sup>)... ...which will monitor and control incoming data (1) and prevent loss/corruption of data from a virus attack (1).</li> <li>• Use strong password (1<sup>st</sup>)... ...passwords that are weak may be easily guessed (1) allowing easy access to the device (1)</li> <li>• Set permissions (1<sup>st</sup>)... ...to prevent the app for accessing sensitive information (1) to keep sensitive data secure (1).</li> <li>• Keep the software up to date (1<sup>st</sup>)... ...by installing required patches/improvements (1) and improve the security of the app (1).</li> <li>• Only use reputable (download) sites//do not click on adverts/click bait/suspicious emails (1<sup>st</sup>)... ...to reduce chance of virus being downloaded (1) as attached to original file (1).</li> </ul>	3	<p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first two methods of protection given. Read whole justification NB that justification may be provided in any section of the answer.</b></p> <p>Question is about reducing the risk of an attack <u>in general</u>.</p> <p>Accept actions that reduce the chance of an attack OR reduce the impact of an attack</p> <p><b>Do Not accept:</b></p> <ul style="list-style-type: none"> <li>• do not use a phone/don't download/don't connect to Internet. The question identifies individuals as customers.</li> <li>• Install security (TV)</li> <li>• Encryption (NAQ)</li> <li>• Any answer based on a different type of network</li> <li>• Use security (TV)</li> </ul>

Question	Answer/Indicative content	Mark	Guidance
16	<p>Identification of benefit is a low demand question, but explanation answer must explain how/why it is a benefit.</p> <p>All answers are reversible and answers that are presented here as expansion may be awarded as benefits</p> <p>Two marks for each benefit explained:</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• <b>Benefit</b> (The feasibility report is used to) confirm if the project is necessary/can achieve what intended (1) <b>Explanation</b> - saving time / money on projects (1).</li> <li>• <b>Benefit</b> (The report can be used to) consider the resources required for the project (1) <b>Explanation</b> - allowing the preparation/purchase of required resources//relevant resources more likely to be available when needed (1).</li> <li>• <b>Benefit</b> (The report will) consider timescales/deadlines of the activities/tasks//how long it will take (1) <b>Explanation</b> – to develop a timeline/timescale for the successful completion of the project//improved chance of completion on time (1).</li> <li>• <b>Benefit</b> (The report will) consider the benefits of the project (1) <b>Explanation</b> - will show if the project is economically viable (accept economic argument <b>once</b> only) (1).</li> <li>• <b>Benefit</b> – Success criteria defined//know requirements (1) <b>Explanation</b> – project has defined targets (1)</li> <li>• <b>Benefit</b> – identifies solutions to constraints//identifies constraints (1) <b>Explanation</b> – problems more easily dealt with//problems known about (1)</li> <li>• <b>Benefit</b> – will be better aware of the potential costs (1) <b>Explanation</b> – will know if project is <b>economically viable</b> (accept economic argument <b>once</b> only) (1)</li> </ul>	4	<p>Titles on lines are for guidance only.</p> <p>Mark first two benefits given. Read whole explanation and award to best advantage <b>NB that explanation may be provided in any section of the answer.</b></p> <p>Where no mark awarded for benefit, no mark available for explanation</p> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>• Decide if project is feasible (as first answer – <b>but consider if expansion is correct on its own</b>)</li> <li>• Repetition of benefit as an explanation</li> <li>• absolute claims:</li> </ul> <p>e.g.</p> <ul style="list-style-type: none"> <li>• Will <b>make sure</b> project completed in time or on budget.</li> </ul>

17		<p><b>Software type is a low demand question and is restricted to the three given here.</b></p> <p><b>Justification must be a statement about why the software type is suitable FOR PLANNING (NOT MONITORING). Third mark <u>may</u> be for expanding this point to describe its impact OR second subsequent justification</b></p> <p><b>One mark available for identifying software type and up to a further two marks for justification:</b></p> <ul style="list-style-type: none"> <li>• Spreadsheet (1st)... e.g. <ul style="list-style-type: none"> <li>○ could be used <b>to store</b> the activities, ...(1)</li> <li>○ could be used <b>to store</b> time scales ...(1)</li> <li>○ could be used <b>to store</b> deadlines ...(1) <ul style="list-style-type: none"> <li>▪ ...create a Gantt chart/table (1) .</li> </ul> </li> </ul> </li> <li>• Database (1st)... e.g. <ul style="list-style-type: none"> <li>○ could be used to store/sort the completion DATES of tasks/activities (1)</li> <li>○ can be used to automatically create a report (1).</li> </ul> </li> <li>• Project Management Software (1st)... e.g. <ul style="list-style-type: none"> <li>○ could be used for budget (planning) (1)</li> <li>○ could be used for communication and collaboration (1)</li> <li>○ to post comments and concerns//communicate with external stakeholders//</li> <li>○ could be used for the easy delegation of tasks (1)</li> <li>○ each person in the team will have access to the information that they need (about who to contact with questions, concerns, suggestions, information, what to do etc). (1).</li> </ul> </li> </ul>	3	<p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first software type given. Read whole justification</b> <b>NB that justification may be provided in any section of the answer.</b></p> <p>Read whole justification and award to best advantage.</p> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>• Large amounts of data can be held (NAQ)</li> <li>• Appropriate for numerical data</li> <li>• Quick/easy/efficient</li> <li>• This is what it is for (TV)</li> <li>• Can create a schedule (repeat of question)</li> </ul>
18	A	<p><b>Two from:</b></p> <ul style="list-style-type: none"> <li>• The data needs to be processed/manipulated (1).</li> <li>• Given context (1).</li> <li>• Given structure/order (1)</li> <li>• Given meaning/makes sense (may state what meaning is) (1).</li> </ul>	2	<p><b>Read whole answer</b></p> <p><b>Further instruction</b></p> <p>Accept a description of processing – such as “data can be put into appropriate fields”.</p>

	B	<p><b>Two marks available for a description:</b></p> <ul style="list-style-type: none"> <li>Data that is (more) <b>correct/accurate/trustworthy (accept synonymous terms)</b> (1) and <b>verifiable/valid</b> (1).</li> </ul>	2	<p><b>Read whole answer</b></p> <p><b>Correct answer only</b></p> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>Examples on own</li> </ul>
	C	<p><b>This is a low demand question, so be generous, and award answers that show awareness of the considerations.</b></p> <p><b>Two marks available for two considerations:</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>The data is private/Must comply with privacy laws/legislation/DPA/GDPR (1).</li> <li>Any implication of DPA/GDPR (up to 2 marks, one per implication)</li> <li>Encryption of information (stored on the Cloud) (1).</li> <li>Security of network//software up to date//cyber attacks (1).</li> <li>Staff training (1).</li> </ul>	2	<p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first two considerations given.</b></p> <p><b>NB may award 1 mark for DPA/GDPR and a further mark for identification of any implication of DPA/GDPR</b></p> <p>Accept any valid answer that is a consideration that a business would have to take into account, including individual aspects of GDPR/DPA legislation</p>
	D	<p><b>Indicative content =</b> benefits and drawbacks to PU of introducing SmartMetres – linked to vulnerabilities.</p> <p><b><u>Environmental</u></b></p> <p><b>Drawbacks</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>Risk of damage from fire (during a house fire) – cost of replacement.</li> <li>Risk of flood (depends on where the meter is placed but if on ground floor a possibility) – cost of replacement.</li> </ul> <p><b>Benefits</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>Helps to achieve energy efficient targets and reducing greenhouse gases.</li> <li>Reduction in transportation with staff visiting premises to read meters. Also reduces greenhouse emissions.</li> </ul>	8	<p><b>Band 3: [6-8 marks]</b></p> <p>Learner <b>explains</b> the benefits AND drawbacks to PU of introducing SmartMeters. Relevant and appropriate contexts are provided to support narrative.</p> <p>Specialist terms will be used correctly and appropriately.</p> <p><i>Any relevant explanation of a benefit or drawback is sufficient for bottom of mark band.</i></p> <p><b>Band 2: [3-5 marks]</b></p> <p>Learner <b>describes</b> the benefits AND/OR drawbacks to PU of introducing SmartMeters.</p>



		<p><b><u>Physical</u></b></p> <p><b>Drawbacks</b> e.g.</p> <ul style="list-style-type: none"> <li>• Can be tampered with.</li> <li>• Can be stolen.</li> <li>• Can be damaged.</li> </ul> <p><b>Benefits</b> e.g.</p> <ul style="list-style-type: none"> <li>• Do not have to send staff to read the meters.</li> <li>• Do not have to estimate customer bills/<b>bills</b> are more accurate.</li> <li>• Will be able to generate correct amount of additional energy as required.</li> <li>• Can establish in real-time the amount of electricity usage and whether further supplies are required and how much is required.</li> </ul> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>• “They will know how much energy you have used”. Answer must be about SmartMeter, not metering in general</li> </ul> <p><b><u>System</u></b></p> <p><b>Drawbacks</b> e.g.</p> <ul style="list-style-type: none"> <li>• Security of customer data.</li> <li>• Capacity to store large quantities of customer data.</li> <li>• Upgrading to new technology and systems.</li> </ul> <p><b>Benefits</b> e.g.</p> <ul style="list-style-type: none"> <li>• Monitoring of customer usage is quicker and easier.</li> <li>• Helps determine price as per demand.</li> <li>• Improves profitability for PU.</li> <li>• Reduces blackouts or outages.</li> </ul>	<p>Some relevant contexts are provided although opportunities will be missed to link these into the narrative.</p> <p>Specialist terms will be used appropriately and for the most part correctly.</p> <p><i>For full marks in this band, at least one benefit and at least one drawback should be described.</i></p> <p><i>Any relevant description of benefit or drawback is sufficient for bottom of mark band.</i></p> <p><b>Band 1: [1-2 marks]</b> Learner has <b>identified</b> benefits or drawbacks to PU of use of SmartMeters. There will be little, if any, use of specialist terms.</p> <p><b>0 marks</b> No response worthy of credit.</p>
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19		<p>Initial statement of advantage is low demand, but explanation must state how/why advantage is an advantage and should be developed for third mark.</p> <p>MUST focus on <b>dynamic charts</b> not charts</p> <p><b>Three marks available for an explanation of an advantage :</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• Has live links (1) so that the data displayed/chart <b>will be automatically updated</b> (1) (and so will be) more current/relevant/reliable (1).</li> <li>• Report only needs to be written once (1) automatic/real time data updates (1) (therefore) saving time/more efficient (1).</li> </ul>	<p><b>3</b></p> <p><b>Further instruction</b></p> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>• User can manipulate the charts to focus on specific items.</li> </ul> <p>Please note that answers such as “data displayed will be current” (<u>will be current</u> is the key point here) is an <b>advantage</b>. Therefore, can be accepted on own, AND answer may be written in a different order to what given here.</p>
20	A	<p><b>Identification of advantage is a low demand question, but explanation must show how/why the advantage is an advantage</b></p> <p><b>All answers are reversible and answers that are presented here as expansions may be awarded as advantages.</b></p> <p><b>Answer must be about impact of using online surveys, and not about using surveys themselves</b></p> <p><b>Two marks for each advantage explained.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• You save money (1) because you do not have to do interviews (1) (Award this expansion once only).</li> <li>• You save time (1) because you do not have to do interviews (1). (Award this expansion once only)</li> <li>• It is available to a wider audience/anywhere with an internet connection (1) which extends the scope of the feedback (1).</li> <li>• The link can be shared (by email) (1) which gives more chance of a higher return / heightened awareness (1).</li> <li>• Once completed/submitted (1) data can be <b>automatically</b> input (for analysis) (1) reduces data entry errors (1)</li> <li>• Reduced chance of <b>data entry</b>/input error (1) as is entered directly (1)</li> </ul>	<p><b>4</b></p> <p><b>Titles on lines are for guidance only.</b></p> <p><b>Mark first two advantages given.</b></p> <p>Answer must be about the advantages of using <b>online surveys</b>:</p> <p><u>Easy to understand ON ITS OWN is TV. However, easy to understand + appropriate expansion may be awarded 2 marks.</u></p> <p><b>Answers can be mixed and matched</b></p> <p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>• “Easier to share” -treat as TV and check to see if further explanation/description makes it clear how/why easier.</li> <li>• “Accurate” on own (TV)</li> </ul>

	B	<p><b>One from:</b></p> <ul style="list-style-type: none"><li>• Email (1)</li><li>• Questionnaire (NOT survey on own) (1).</li><li>• Interviews (1).</li><li>• Loyalty schemes (1).</li><li>• Consumer panel/focus group (1).</li><li>• Online forum (1).</li><li>• Social media (or example) (1).</li><li>• Letter/complaint (1).</li><li>• Telephone (1).</li><li>• Verbal (1).</li><li>• Written (1).</li><li>• Text (1).</li><li>• Doorstep survey (or other example of survey, but example must be given) (1)</li><li>• Rating system (1)</li></ul>	<p><b>Do not accept:</b></p> <ul style="list-style-type: none"><li>• Answers which refer to the use of a secondary source</li></ul>
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