

# OCR

Oxford Cambridge and RSA

**Level 1/2 Cambridge National Certificate in Information Technologies**

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

**MARK SCHEME**

**Duration:** 1 hour 45 minutes

**MAXIMUM MARK    80**

This document consists of 18 pages
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### PREPARATION FOR MARKING ON-SCREEN

1. Make sure that you have accessed and completed the relevant and training packages for on-screen marking: *scoris assessor Online Training* and the *OCR Essential Guide to Marking*.
2. Make sure that you have read and understood the Instructions for On-Screen Marking and the mark scheme and the question paper for this unit. These are posted on the RM Cambridge Assessment Support Portal <http://www.rm.com/support/ca>
3. Log-in to scoris and mark the **required number** of practice responses and the **required number** of standardisation responses.

### PREPARATION FOR PAPER BASED MARKING

1. Make sure that you have accessed and completed the relevant training for paper based marking.
2. Make sure that you have read and understood the Instructions for Specialist Marking and the mark scheme and the question paper for this unit.
3. Before the Standardisation meeting you must mark at least 10 scripts from several centres. Use **pencil** and follow the **mark scheme**. Bring these **marked scripts** to the meeting

### MARKING INSTRUCTIONS – FOR MARKING ON-SCREEN AND FOR PAPER BASED MARKING

1. Mark strictly to the mark scheme.
2. Marks awarded must relate directly to the marking criteria.
3. The schedule of dates is very important. It is essential that you meet the scoris 50% and 100% (traditional 40% Batch 1 and 100% Batch 2) deadlines. If you experience problems, you must contact your Team Leader (Supervisor) without delay.
4. If you are in any doubt about applying the mark scheme, consult your Team Leader by telephone or the scoris messaging system, or by email.
5. **Crossed Out Responses**

Where a candidate has crossed out a response and provided a clear alternative then the crossed out response is not marked. Where no alternative response has been provided, examiners may give candidates the benefit of the doubt and mark the crossed out response where legible.

### **Rubric Error Responses – Optional Questions**

Where candidates have a choice of question across a whole paper or a whole section and have provided more answers than required, then all responses are marked and the highest mark allowable within the rubric is given. Enter a mark for each question answered into RM assessor, which will select the highest mark from those awarded. *(The underlying assumption is that the candidate has penalised themselves by attempting more questions than necessary in the time allowed.)*

### **Multiple Choice Question Responses**

When a multiple choice question has only a single, correct response and a candidate provides two responses (even if one of these responses is correct), then no mark should be awarded (as it is not possible to determine which was the first response selected by the candidate).

*When a question requires candidates to select more than one option/multiple options, then local marking arrangements need to ensure consistency of approach.*

### **Contradictory Responses**

When a candidate provides contradictory responses, then no mark should be awarded, even if one of the answers is correct.

### **Short Answer Questions** (requiring only a list by way of a response, usually worth only **one mark per response**)

Where candidates are required to provide a set number of short answer responses then only the set number of responses should be marked. The response space should be marked from left to right on each line and then line by line until the required number of responses have been considered. The remaining responses should not then be marked. Examiners will have to apply judgement as to whether a 'second response' on a line is a development of the 'first response', rather than a separate, discrete response. *(The underlying assumption is that the candidate is attempting to hedge their bets and therefore getting undue benefit rather than engaging with the question and giving the most relevant/correct responses.)*

### **Short Answer Questions** (requiring a more developed response, worth **two or more marks**)

If the candidates are required to provide a description of, say, three items or factors and four items or factors are provided, then mark on a similar basis – that is downwards (as it is unlikely in this situation that a candidate will provide more than one response in each section of the response space.)

### **Longer Answer Questions** (requiring a developed response)

Where candidates have provided two (or more) responses to a medium or high tariff question which only required a single (developed) response and not crossed out the first response, then only the first response should be marked. Examiners will need to apply professional judgement as to whether the second (or a subsequent) response is a 'new start' or simply a poorly expressed continuation of the first response.

6. Always check the pages (and additional objects if present) at the end of the response in case any answers have been continued there. If the candidate has continued an answer there then add a tick to confirm that the work has been seen.
7. Award No Response (NR) if:
- there is nothing written in the answer space.

Award Zero '0' if:

- anything is written in the answer space and is not worthy of credit (this includes text and symbols).

Team Leaders must confirm the correct use of the NR button with their markers before live marking commences and should check this when reviewing scripts.

8. The scoris **comments box** is used by your team leader to explain the marking of the practice responses. Please refer to these comments when checking your practice responses. **Do not use the comments box for any other reason.** If you have any questions or comments for your team leader, use the phone, the scoris messaging system, or e-mail.
9. For answers marked by levels of response:
- To determine the level** – start at the highest level and work down until you reach the level that matches the answer
  - To determine the mark within the level**, consider the following:

Descriptor	Award mark
On the borderline of this level and the one below	At bottom of level
Just enough achievement on balance for this level	Above bottom and either below middle or at middle of level (depending on number of marks available)
Meets the criteria but with some slight inconsistency	Above middle and either below top of level or at middle of level (depending on number of marks available)
Consistently meets the criteria for this level	At top of level

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

<b>Annotation Name</b>	<b>Description</b>	<b>What it means to you the AE on this paper</b>
Highlight	Highlight (mandatory for all units)	Can use this to show areas on diagram or long response which you think is important.
Off Page Comment	Off page comment (mandatory for all units)	Not needed
BP	Blank page (mandatory for all units)	ON extra pages with no writing – needed on AOs
Tick P	Correct mark	
Cross X	In correct mark	
TV	Too vague	Not enough in your opinion to award the mark
SEEN	Noted but no credit given	Use on questions where there is NO RESPONSE
NE	No example	Not needed
BOD	Benefit of doubt	In your professional opinion you can see what they are saying and award the mark.
NBOD	Benefit of doubt not given	In your professional opinion you don't think they meant the answer
NAQ	Not answered question	
L3	Level 3	Only to be used on Questions 10 & 18.
L2	Level 2	
L1	Level 1	
REP	Repeat	The candidate has already said this, so they don't get it a second credit.
FA	First answer seen and marked. Incorrect answer given	Not needed

## MARK SCHEME FORMAT

Question	Answer/Indicative content	Mark	Guidance
1	<p><b>One mark for valid answer.</b></p> <ul style="list-style-type: none"> <li>• initiation (1).</li> <li>• planning (1).</li> </ul>	1	
2	<p><b>One mark for valid answer.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• activities (1).</li> <li>• tasks (1).</li> </ul>	1	Mark first answer given.
3	<p><b>One mark for valid answer.</b></p> <ul style="list-style-type: none"> <li>• (desktop) publishing/DTP (1).</li> <li>• presentation software (1).</li> <li>• art packages (1).</li> <li>• word processing (1).</li> </ul>	1	<p>Accept any reasonable software with drawing tools to create an image to show what it is going to look like.</p> <p>Accept trade names.</p>
4	<p><b>For two marks.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• better quality feedback/more detailed feedback (1).</li> <li>• <u>more</u> accurate/more timeous (1).</li> <li>• opinions given by people who have used the product/feedback is more informed (1).</li> <li>• longer interviews are possible (1).</li> <li>• cross section of consumers invited/different ages of consumers (1).</li> <li>• better engagement as have volunteered (1).</li> <li>• allows facial reactions to be seen (1).</li> </ul>	2	<p>Numbers on the answer area are for reference only. Candidate may have written both answers in the first space.</p> <p>Mark first two answers.</p> <p>This question asks candidates to <b>identify</b>, and not to describe or explain. Therefore, mark the answer given, even if explanation or discussion is not totally correct.</p> <p>Accept answers relating to the use of a consumer panel to collect feedback on the new healthy snack range.</p> <p>DO NOT accept “easy to collect feedback” or similar DO NOT accept “process is quicker” or similar. <b>However</b>, ‘feedback can be provided directly’ is acceptable DO NOT accept ‘data is accurate.</p>

Question	Answer/Indicative content	Mark	Guidance
5	<p><b>Two marks for full definition.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• to steal data/personal information (1) through use of a fake website (1).</li> <li>• to redirect people from a legitimate website (1) to a fake website (1) to steal data (1).</li> <li>• to redirect web users (1) to a fake website/without their knowledge (1).</li> </ul>	2	Answer must show an awareness of the intention to steal data or that the second website is false.
6	<p><b>One mark for valid answer.</b></p> <ul style="list-style-type: none"> <li>• evaluation (1).</li> </ul>	1	CAO.
7	<p><b>Two marks for valid description.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• you can hear their voice (1) to understand what the product is (1).</li> <li>• you can show the product (1) with a camera (1).</li> <li>• there is an opportunity for two-way dialogue (1) to increase understanding (1).</li> <li>• can be used using a wide range of mobile devices(1), meaning it is a flexible method (1).</li> <li>• less hardware in the building (1) as use same cabling (etc.) for cable and voice (1).</li> <li>• allows for group calls (1) that allow sharing information with more than one store manager at a time/making communication more efficient (1).</li> <li>• there is no marginal/extra cost (1) if paying for data at a flat fee (1).</li> </ul>	2	DO NOT accept “Easier” or “Faster” or “Easier to set up”. DO NOT accept “Cheaper”.

Question		Answer/Indicative content	Mark	Guidance
		<b>QUESTIONS FOCUS ON CASHLESS CATERING SCENARIO (Q8 – Q11)</b>		
8	a	<p><b>One suitable input.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• (user/school/client) requirements (1).</li> <li>• (user/school) constraints/boundaries (1).</li> <li>• business case (1).</li> <li>• resources (1) (accept examples).</li> </ul>	1	<p>Accept “collection of ideas for what user wants”.</p> <p>Accept use of specific terms/examples.</p>
	b	<p><b>One suitable output.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• project plan (1).</li> <li>• test plan (1).</li> <li>• constraints list (1).</li> <li>• phase review (1).</li> </ul>	1	
9		<p><b>Two marks for a valid description.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• as personal data is being used (1) the data must be protected (1).</li> <li>• personal data must be protected (1) which is a requirement (1).</li> <li>• the school must make sure personal data is up to date (1), to meet the legal requirements (1).</li> <li>• must comply with the legal requirements (1) as involves personal data (1).</li> </ul>	2	<p>First and second parts of these answers can be mixed and matched.</p> <p>Mark first answer.</p> <p>Other aspects of the DPA are applicable.</p> <p>Answer must be based on the scenario. Where answer is <u>clearly</u> not based on scenario, no marks available.</p> <p>Data Protection Act on its own would be sufficient for one mark.</p>

Question	Answer/Indicative content	Mark Guidance
10	<p><b>Indicative Content:</b></p> <ul style="list-style-type: none"> <li>• Financial resources can be allocated in advance, so that the school can plan spending and keep within its budget.</li> <li>• Phase reviews take place, meaning that the school will be able to see the progress being made and to see that the project is on schedule, this will increase the confidence that the school has that the cashless payment system will be delivered on time.</li> <li>• The feasibility report produced by the project team will allow the school to abandon/postpone the project after the initiation phase, if it will not be possible to deliver the cashless payment system within the time/financial constraints.</li> <li>• The project team will have created agreed project and test plans, so the school will know what the delivered cashless payment system will be like.</li> <li>• A recognised series of steps to help organise the project.</li> </ul>	<p><b>Mark Band 3: (6-8 marks)</b> Candidate explains the advantages to the school of following the project life cycle when developing the cashless payment system. Answer will be given in context.</p> <p>At the bottom of the mark band more than one advantage has been explained, each in reasonable depth.</p> <p><b>Mark Band 2: (3-5 marks)</b> Candidate describes the advantages to the school of following the project life cycle when developing the cashless payment system. Answer may not be given in context.</p> <p>At the top of the mark band more than one advantage has been described.</p> <p>At the bottom of the mark band weak description of one advantage.</p> <p><b>Mark Band 1: (1-2 marks)</b> Candidate identifies generic points in relation to the project life cycle.</p> <p>At the top of the mark band more than one advantage identified.</p> <p>At the bottom of the mark band any point made.</p> <p><b>0 marks</b> No answer given or answer not worthy of credit.</p>

Question		Answer/Indicative content	Mark	Guidance
11	a	<p><b><i>Two marks for two suitable constraints.</i></b></p> <p>e.g.</p> <ul style="list-style-type: none"><li>• time (1).</li><li>• resources (1).</li><li>• security (1).</li><li>• risk management (1).</li><li>• budget/money/finances (1).</li><li>• staff expertise (1).</li><li>• legislation (1).</li></ul>	2	Mark first answer given.

b	<p><b>Two marks for valid description:</b></p> <p><b>Examples of possible exemplification provided below:</b></p> <p><b>time:</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>tasks schedule can be carefully planned/create gantt (or equivalent) chart/follow project lifecycle (1), so lower risk of delays/deliver on time (1).</li> <li>time contingency can be built in to the project (1) so delivery of system to school will not be delayed (1).</li> </ul> <p>Two marks for valid description:</p> <p><b>resources:</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>a cost contingency can be built in to the project (1) to prevent overspend (1).</li> <li>costs used in planning phase must be accurate (1) to stay within the budget (1).</li> </ul> <p>Two marks for valid description:</p> <p><b>security:</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>purchase of anti-virus software is included in the project plan (1) to reduce risk of security breach (1).</li> <li>project team consider cyber-security measures (1) in the feasibility study (1).</li> </ul>	2	<p>Any constraint given must be reviewed on its own merits in relation to the description. If valid award marks.</p> <p>DO NOT award answers that suggest that checking that the constraint exists is a method of mitigation (e.g. check that you have enough resources before the project starts).</p>
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		<p>Two marks for valid description:</p> <p><b>risk management:</b></p> <p>e.g.</p> <ul style="list-style-type: none"><li>• the impact of each risk is considered (1) to prioritise the important ones (1).</li><li>• project team consider the probability of each risk (1) to reduce the chance of problems (1).</li></ul> <p>Two marks for valid description:</p> <p><b>budget:</b></p> <p>e.g.</p> <ul style="list-style-type: none"><li>• check all spending is required (1) so that no money is wasted (1).</li><li>• reduce waste (1) so that best use is made of all resources (1).</li></ul>		
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Question		Answer/Indicative content	Mark	Guidance
		<b>QUESTIONS FOCUS ON PROGRESS HARRIERS SCENARIO (Q12 – Q15)</b>		
12	a	<p><b><i>One mark for valid answer.</i></b></p> <ul style="list-style-type: none"> <li>• shoulder surfing (1).</li> <li>• baiting (1).</li> </ul>	1	
	b	<p><b><i>Up to three marks for valid explanation.</i></b></p> <p><b><i>Identification of method (1).</i></b></p> <p><b><i>Explanation of how the method solves the problem (2).</i></b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• train all race officials on the types of social engineering (1), so that they are better able to identify social engineering threats (1) and know how to take counter measures (1).</li> <li>• make members of Progress Harriers aware of the possible consequences to the club of a social engineering threat (1), they will be more motivated to be vigilant (1) reducing the chance of them divulging confidential information (1).</li> <li>• encourage members to report any email that might pose a threat (1), enabling the club to take action (1) by informing all other members (1).</li> <li>• physical screens/nobody else in the room (1) physically keeps others away from the data (1) so they cannot see it to steal it (1).</li> </ul>	3	<p>Accept answers relating to <b>any</b> form of social engineering.</p> <p>DO NOT award “hire a white hat hacker” or equivalent.</p> <p>Answer must be about stopping social engineering not managing the impacts of social engineering.</p>

13	a	<p><b>Physical prevention measures – MAX one.</b></p> <p>e.g.</p> <ul style="list-style-type: none"><li>• biometric access device (1).</li><li>• cable (1).</li><li>• lock the doors (1).</li><li>• turn off computer when not in use (1).</li></ul> <p><b>Logical prevention measures – MAX two.</b></p> <p>e.g.</p> <ul style="list-style-type: none"><li>• username and password (1)/password (1).</li><li>• access rights (1).</li><li>• encryption (1).</li><li>• secure backups (1).</li><li>• firewall (1).</li><li>• anti-virus (1).</li></ul>	3	<p>Answers may deal with the issues raised in the scenario OR be general issues.</p>
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Question	Answer/Indicative content	Mark	Guidance
13 b	<p><b>Up to two marks for a valid description.</b></p> <p><b>Examples of possible exemplification provided below:</b></p> <p><b>access rights</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• unauthorised access will be prevented (1) as a username and password will be needed to access the data (1).</li> <li>• the data can only be accessed by authorised people (1) who have the correct credentials (1).</li> </ul> <p><b>encryption</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• people will only be able to read the data (1) if they have the encryption key (1).</li> <li>• the data will be scrambled (1) and will not be able to be understood if stolen (1).</li> </ul> <p><b>secure backups</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• data can be restored from a secure backup (1) if the original data has been lost (1).</li> <li>• secure backups of data stored away from the original data (1) will reduce the risk of damage to both at the same time (1).</li> </ul>	2	<p>Any logical prevention measure given must be reviewed on its own merits in relation to the description. If valid award marks.</p> <p><b>Encryption</b> DO NOT accept “data will be unreadable” – data is scrambled, not made unreadable</p>

14	a	<p><b>Two marks for a valid description.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• validation (1st) checks data is of correct type/suitable (1) to reduce data entry errors (1).</li> <li>• forms (1st) data entered one record at a time/use of prompts guides the user/enter data into different tables (1st).</li> <li>• tables (1) organise data into groups (1).</li> <li>• columns (1st) so that the same type of data is added to the same (relative) place (1).</li> <li>• rows (1st) enter the data for one data subject into one organised row (1).</li> </ul>	2	<p>First mark is for identifying the feature.</p> <p>If no feature identified, no marks may be awarded.</p>
	b	<p><b>Two marks for a valid description.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• query (1st) to search data using given criteria/ find <u>specific</u> (or equivalent) information (1) can be saved and used again (1).</li> <li>• report (1st) can be used to present information in an easy to read form/that can be printed out (1).</li> <li>• print (1st) to generate a hard copy (1).</li> </ul>	2	<p>First mark is for identifying the feature.</p> <p>If no feature identified, no marks may be awarded.</p> <p>DO NOT accept “to find information” as an extension for query. This must be a query to find specific or a type of information.</p> <p>Equivalent to specific can be quite loose – accept “extract data according to the user’s request”, for example.</p>

	c	<p><b>Three marks for each valid explanation - MAX three per explanation.</b></p> <p>Reason (1). Explanation of reason (2).</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• Relational database (1) reduces data redundancy (1) smaller file size/less chance of data entry error (1).</li> <li>• Databases use multiple tables (1) linked by relationships (1) to create complex queries (1).</li> <li>• Database input forms (1) and a switchboard (1) can be used to simplify the user interface (1).</li> <li>• Progress Harriers only record data (1) so they will not need to perform calculations (1), produce charts/ use complex functions (1).</li> </ul>	6	<p>Accept converse answers about spreadsheets (spreadsheets DO NOT have ....)</p> <p>DO NOT accept answers that suggest that only databases can use queries or that the reason is simply due to queries.</p> <p>DO NOT accept answers to do with ease or speed of set up.</p>
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Question		Answer/Indicative content	Mark	Guidance
15	a	<p><b>For one mark.</b></p> <ul style="list-style-type: none"> <li>integrated document (1).</li> </ul>	1	CAO.
	b	<p><b>Two marks for each valid explanation - MAX two per explanation.</b></p> <p>Identification of advantage (1). How this is an advantage/what caused it (1).</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>reduced data entry errors/data for competitors is reliable (1) as using the information directly from the database (1).</li> <li>it will take less time (1) as this process can be automated (1) / the document can be reused (1).</li> <li>(source) data can easily be changed (1) if there is an error (1).</li> <li>once set up it can be used by less skilled workers (1) without the need for training (1) / they can produce a document beyond their skills level (1).</li> <li>template can be populated with data from the database (1) which is more efficient (1).</li> <li>the use of templates gives a consistent layout (1) because the fields are pre-positioned (1).</li> </ul>	4	<p>This answer is NOT dependant on Q15a.</p> <p>Accept answers relating to both mail merge or use of template.</p>

			QUESTIONS FOCUS ON CHARITY SCENARIO (Q16 – Q21)		
16	a	i	<p><b>One mark for a suitable device.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• tablet (1).</li> <li>• notebook (1).</li> <li>• smartphone (1).</li> <li>• touchscreen (1).</li> <li>• laptop (1).</li> <li>• keyboard (1).</li> </ul>	1	<p>Input devices, IN CONTEXT as well as general devices are acceptable.</p> <p><b>Discussion – where do people fill in the online questionnaire?</b></p> <p>The device must be suitable for use in the street.</p> <p>Do not accept “phone” (mark as TV).</p> <p>Do not accept “mobile device/phone”.</p> <p>Do not accept “mouse”.</p>
	a	ii	<p><b>One mark for a suitable connectivity requirement.</b></p> <ul style="list-style-type: none"> <li>• mobile data (1).</li> <li>• WI-FI (1).</li> <li>• 3G data (1).</li> <li>• 4G data (1).</li> <li>• (mobile) broadband (1).</li> <li>• NIC (1).</li> </ul>	1	

	b	<p><b>Three marks for valid explanation.</b></p> <p><b>Implication (1).</b> <b>Explanation (2).</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>the charity could collect inaccurate data (1) as the questions could be ambiguous (1), leading to poor choices being made (1).</li> <li>the charity could lose income (1) because data collected will be invalid (1) leading to poor marketing decisions (1) and the charity targeting the wrong potential donors (1).</li> <li>the reputation may be damaged (1) which will result in financial loss (1) as donors will stop making donations (1).</li> </ul>	3	Answers may be more generic here and not necessarily based on the charity.
17	a	<p><b>Two from.</b></p> <ul style="list-style-type: none"> <li>text (1).</li> <li>alphanumeric (1).</li> <li>numeric (1).</li> <li>currency (1).</li> <li>date/time (1).</li> <li>limited choice (1).</li> <li>object (1).</li> <li>logical/Boolean/true-false/yes-no (1).</li> </ul>	2	DO NOT accept "number".

Question	Answer/Indicative content	Mark	Guidance
b	<p><b>Up to TWO marks for a full justification</b></p> <p><b>Examples of possible exemplification provided below:</b></p> <p>Two marks for justification in relation to text:</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• the data stored will include first names (1) which only contain text (1).</li> <li>• the address details will include the town (1) comprised of letters only (1).</li> </ul> <p>Two marks for justification in relation to alphanumeric:</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• telephone numbers will be stored (1), these have a leading zero which alphanumeric will allow (1).</li> <li>• post codes will be stored (1), these contain numbers and letters (1).</li> </ul> <p>Two marks for justification in relation to logical/Boolean:</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• the database includes Yes/No data for 'monthly basis' (1), this is best stored as a Boolean (1).</li> <li>• a logical data type is best for True/False data (1), such as 'wants direct marketing' (1).</li> </ul> <p>Two marks for justification in relation to limited choice:</p> <p>e.g.</p>	2	<p>Any chosen data type given must be reviewed on its own merits in relation to the justification. If valid award marks.</p> <p>Acceptable answers will typically be of the form of stating that the data stored includes the specific data type, followed by why that data type is therefore appropriate.</p>

		<ul style="list-style-type: none"><li>the database will include the title of each donor (1), so a drop down list for Mrs, Ms, Mr etc. will be easy to use (1).</li><li>the address of each donor will include the county (1), input errors will be reduced if a drop down list of counties is used (1).</li></ul> <p>Two marks for justification in relation to date:</p> <p>e.g.</p> <ul style="list-style-type: none"><li>the date of birth of each donor will be stored (1) so will need to be stored as a date format to allow queries (1).</li><li>the date of donations will be stored (1), this data will only contain date information (1).</li></ul> <p>Two marks for justification in relation to numeric:</p> <p>e.g.</p> <ul style="list-style-type: none"><li>the value of each donation will be stored (1), this will be a number of pounds (1).</li><li>the age of each will be stored (1), this will be a number of years and months (1).</li></ul>		
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Question	Answer/Indicative content	Mark Guidance
18	<p><b>Indicative Content:</b></p> <ul style="list-style-type: none"> <li>• The charity could use names and addresses of donors to send out integrated documents appealing for donations, but it must check that these details are up to date to reduce errors and to maximise donations.</li> <li>• The charity could use a spreadsheet to look for trends in the data to identify which donors are likely to give money again, helping to target marketing more accurately and increase donations.</li> <li>• Postcodes could be used to look for patterns in the home location of donors and to identify hot spots and cold spots. Action can then be taken to increase donations in cold spots.</li> <li>• Database queries could be used to identify donors who pay on a monthly basis; these donors could be contacted by email, asking them to increase their monthly donation. Similarly, donors that do not make a donation every month could be asked to do so.</li> <li>• Answer <b>MUST</b> be about how data be put to use, not stored or managed.</li> </ul>	<p><b>Mark Band 3: (7-10 marks)</b> Candidate explains the different ways in which the charity could use this data. Answer will be given in context.</p> <p>At the bottom of the mark band more than one way has been explained, each in fair depth.</p> <p><b>Mark Band 2: (4-6 marks)</b> Candidate describes the different ways in which the charity could use this data. Answer may not be given in context.</p> <p>At the top of the mark band more than one way has been described.</p> <p>At the bottom of the mark band weak description of one way.</p> <p><b>Mark Band 1: (1-3 marks)</b> Candidate identifies generic points in relation to the way data could be used.</p> <p>At the top of the mark band more than one way identified.</p> <p>At the bottom of the mark band any point made.</p> <p><b>0 marks</b> No answer given or answer not worthy of credit.</p>

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19	<p><b>Two marks for suitable environmental vulnerabilities.</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• flooding (1).</li> <li>• fire (1).</li> <li>• lightning strike (1).</li> <li>• storm (1).</li> <li>• natural disaster (1).</li> </ul>	2	
20	<p><b>Three marks for valid explanation.</b></p> <p><b>Identification of financial implication (MAX 2).</b>  <b>Explanation of why this implication occurred (MAX 2).</b></p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• Money could be lost/stolen (1) as the target of the attack was the charities funds/information to get to the funds (1) so access data/passwords have been targeted (1).</li> <li>• The charity might have to spend money to investigate the cyber-security attack (1), recover from the attack (1) and improve data security (1).</li> <li>• The charity might lose income, (1) due to loss of donations (1) from donors who do not trust the charity (1) because their personal data has been stolen (1).</li> </ul>	3	DO NOT accept indirect implications, such as ransom requests or DPA implications, etc.

21		<p><b>Three marks for each valid explanation - MAX three per explanation.</b></p> <p>Reason (1). Explanation of reason (2).</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• The data on the use of solar panels could contain personal data (1) and must not be shared without the permission of the donors (1), as this would be illegal under the legislation (1).</li> <li>• This data might allow individual donors to be identified (1) so it is personal data (1) and covered by the relevant legislation (1) so the charity will need donors permission to share it (1).</li> <li>• The data was given to the charity not the other company (1). So, if the information is given out they could be sued (1) as it is against legal requirements (1).</li> </ul>	6	<p>DO NOT accept answers that imply the Green Energy supplier is anything other than a green energy supplier.</p> <p>DO NOT accept answers that are based on misuse of data or other implication after it has been given away. Question is about the response to the initial request.</p> <p>Acceptable answers may not be presented in the same order as here, or may be partial. For example "DPA states that data should only be used for the stated purpose (1) may be awarded a mark.</p>
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