Cambridge TECHNICALS LEVEL 3

IT

Feedback on the January 2018 exam paper (including selected exemplar candidate answers and commentary)

Unit 2 – Global information
Version 1
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INTRODUCTION

This resource brings together the questions from the January 2018 examined unit (Unit 2), the marking guidance, the examiners comments and the exemplar answers into one place for easy reference.

We have also included exemplar candidate answers with commentary for Questions 2(d), 3 and 8.

The marking guidance and the examiner’s comments are taken from the Report to Centre for this question paper.

The Question Paper, Mark Scheme and the Report to Centre are available from:

https://interchange.ocr.org.uk/Modules/PastPapers/Pages/PastPapers.aspx?menuindex=97&menuid=250
GENERAL EXAMINER COMMENTS ON THE PAPER

It was pleasing to note that the overall performance of the candidates had improved from the Summer 2017 series. However, it was also noted that many candidates still demonstrated knowledge gaps in relation to the unit content. Centres should ensure that candidates are familiar with all areas of the unit content prior to being entered for the external examination.

The correlation between content, context and command word also appeared to be limited. Candidates should be aware of the differing command words, e.g. identify, describe, explain, discuss and the demands of each of these. Candidates should also be familiar with the concept that questions may have a specific focus. It is this focus which should be considered by candidates when composing their responses to questions.

In this unit, a pre-release case study is issued. This provides the context for Section A of the external examination. Many candidates appeared to be unfamiliar with the context of the case study. For this external examination this was Progress DogTravel. This apparent lack of familiarity limited candidate's accessibility to many of the questions in Section A of the external examination where the questions are directly linked to this case study.

The case study also includes some research prompts for candidates. These prompts should not be ignored as the knowledge gained through completing the research will enhance accessibility to the questions in Section A.

Section B of the external examination does not require candidates to link their responses to the case study. It was, however, noted that there was evidence of knowledge gaps from the candidates' responses in this section.

There are many resources available which can be used during the teaching of this unit. Centres are encouraged to access the resources available from the OCR website that relate to the interpretation of the case study and exemplification/analysis of candidate responses from the Summer 2017 series.

Resources which might help address the examiner comments:

From the link below, you'll find 'The OCR guide to examinations' (along with many other skills guides)
http://www.ocr.org.uk/i-want-to/skills-guides/

Command verbs definitions
Organisational Profile

Introduction

*Progress DogTravel* is a business which organises travel for dogs whose owners are emigrating from the UK. Dogs stay in the kennels before travelling to their destination country. Dogs that stay in the kennels must be up-to-date with their vaccinations and be microchipped.

Travel Service

*Progress DogTravel* organises all aspects of the travel process including dropping the dog off at the Animal Health Centre of the departure airport.

To enable the travel process to be started the following details are required:

- owner’s contact details;
- name, microchip number and breed of the dog;
- proposed departure date;
- destination country;
- start date of the stay at the kennels;
- contact details of the vet the dog is currently registered with;
- details of the insurance policy if appropriate;
- vaccination details;
- any preferences, e.g. airline to be used.

All aspects of the dog travelling out of the UK are organised including:

- organising and booking flights;
- DEFRA Export Health Certificate (EHC);
- EU Pet Passport (EUPP);
- mandatory checks on departure including blood tests and the checking of microchips and vaccinations, including rabies;
- vet checks on departure from the UK and arrival in the destination country;
- IATA Approved Air Kennels.

Each country has different rules for dogs arriving from the UK. For example, some countries require dogs to have up-to-date rabies vaccinations whilst others, because the UK is free of rabies, do not have this requirement.

The most up-to-date rules and regulations are consulted before a booking is taken for the travel service. *Progress DogTravel* is then able to advise owners of the relevant rules and, where appropriate, of any health and medical requirements. It will then also reserve the quarantine kennels in the country of arrival.

For example, if a dog is travelling to Australia then a permit from the Australian Quarantine and Inspection Service must be obtained prior to any travel arrangements being organised. On arrival in Australia, the dog must stay in quarantine kennels for a minimum of 10 days. However, if a dog is travelling to Europe then a pet passport and vaccination details are required. The dog must also have had a rabies injection at least 21 days before the dog travels.

Most of the communication with the destination countries is done electronically. Some countries require the paperwork to be scanned and emailed or uploaded to an online storage area as the dog’s flight departs the UK. There are other countries, however, where the paperwork, in hard copy format, must accompany the dog.

The dog’s travel arrangements are kept in a database which is backed up at the end of every day to a secure online storage area. Problems have begun to arise as, currently, the dog’s record is accessed using its name. This has caused confusion when two dogs have the same name. There have been several instances when the incorrect paperwork has accompanied the dog.

**Fig. 1** shows an excerpt from the dog travel arrangements database, showing some complete records. The actual database contains all the data about every dog for which travel has been arranged during the past two years. *Progress DogTravel* has incorporated validation routines into the database, such as drop down lists, to minimise data entry errors.
To prepare for the examination, you should research the following themes:

- The differing global holders of information including location, the technologies available, access issues and the category of information used.
- The differing information styles, sources and data types used by Progress DogTravel.
- The consequences of poor quality information on Progress DogTravel and its stakeholders.
- Legal requirements relating to the storage and use of information, including the impacts and consequences and how Progress DogTravel can conform with these requirements.
- How information can be kept securely to maintain confidentiality, integrity and availability.

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### Excerpt from the dog travel arrangements database

<table>
<thead>
<tr>
<th>Dog Name</th>
<th>Date of Flight</th>
<th>Airline</th>
<th>Destination</th>
<th>Quarantine Day</th>
<th>EHC</th>
<th>EUPP</th>
<th>Permit</th>
<th>MC No</th>
<th>Date of Rabies Vaccination</th>
<th>Days Rabies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bramble</td>
<td>11/11/2016</td>
<td>Air France</td>
<td>Paris</td>
<td>0</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
<td>957502</td>
<td>01/11/2016</td>
<td>10</td>
</tr>
<tr>
<td>Monty</td>
<td>31/10/2016</td>
<td>British Airways</td>
<td>Antigua</td>
<td>10</td>
<td>☑</td>
<td>☐</td>
<td>☑</td>
<td>110110</td>
<td>17/10/2016</td>
<td>14</td>
</tr>
<tr>
<td>Snuffles</td>
<td>24/11/2016</td>
<td>Emirates</td>
<td>Jordan</td>
<td>15</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>562541</td>
<td>01/11/2016</td>
<td>23</td>
</tr>
</tbody>
</table>

**Fig. 1**
Questions 1 and 2(a)

Answer all the questions.

Section A

This section relates to the case study on Progress DogTravel.

1. (a) Identify one field in the dog travel arrangements database which is of the text information style.
   - dog name (1)
   - airline (1)
   - destination (1) 
   ...[1]

   (b) (i) Identify the information style used in the Days Rabies field in the dog travel arrangements database.
   - numerical/number/integer (1)
   ...[1]

   (ii) Explain why this information style has been used.
   - The field is a calculated field (1) using date of flight and date of rabies fields (1) the answer must be in number of days (1).
   - Shows number of days (1)
   - Any other valid suggestion.
   ...[3]

2. Some of the information on the travel paperwork shows the date the dog’s rabies vaccination was given.

   (a) Identify the information data type this date would be included in. Justify your choice.

   Information data type: Secondary/quantitative (1st)

   Justification:
   3 from:
   - The data has been collected by someone other than PDT (1).
   - The data was originally collected as part of the dog's vaccination record (1).
   - The data has been transferred to the paperwork to be used at the destination (1).
   - The data has been provided by the vet who gave the rabies injection (1).
   - Shows dates (1)
   - Any other valid suggestion.
   ...[4]
Mark Scheme Guidance

Question 1(a):
1 from list.
For 1 mark.

Question 1(b)(i):
For 1 mark.
Correct answer only.

Question 1(b)(ii):
Points marking approach.
Can be:
- 3 individual points
- 1 complete explanation for 3 marks.
Allow example from table.
Marks can be awarded if 0 marks awarded for b(i) BUT must be in context of case study.

Question 2(a):
Points marking approach.
The data type must be correct to enable marks for the justification to be awarded.

Examiner comments

This section of the external examination was directly linked to the case study, Progress DogTravel.

Question 1 – The focus of this question was on the information styles used within the dog travel arrangements database used in Progress DogTravel. An excerpt from this database had been provided in the case study. The question linked to bullet point 2 in the research points in the case study.

Part a of the question required candidates to identify a field in the database which is of the text information style. Most candidates were able to correctly identify a correct field – dog name, airline or destination.

Part (b)(i) of the question required candidates to identify the information style used for the Dogs Rabies field of the database. Most candidates were able to correctly identify this as being of the numerical/number data type. Part (ii) of this question then required candidates to explain why this information style had been used. Many candidates were able to provide some detail about this choice of information style but the explanations were, on the whole, limited to the fact that the information held in this field was based on a number (being the number of days) which has to be a whole number. Few candidates were able to then provide further explanations, such as this field is a calculated field using the data of the rabies injection and the date of the flight.

Question 2 – The focus of this multi-part question was on the information held in the Dog Travel arrangements database, This question linked to bullet points 2 and 3 of the research points.

Part (a) of the question required candidates to identify the information data type that the date of the rabies injection was included in. Many candidates failed to provide a correct answer to this part of the question. Acceptable information data types included secondary or quantitative. The date the rabies injection was given to the dog would have been provided by the vet who provided the injection. As the vet is an external source to Progress DogTravel the most appropriate response was secondary. Quantitative was an acceptable response as the data was a date.
Questions 2(b), (c) and (d)

(b) Identify the category of information the dog's travel paperwork would be included in.

- communication/location dependant/planning (1) ........................................... [1]

(c) Explain why it is important that the dog's travel paperwork contains good quality information.

- All relevant information should be included with no omissions (1) to meet the requirements of the destination country (1).
- The information on the paperwork must enable the matching (1) of the microchip number to that shown when the dog is scanned (1).
- If any of the information is of poor quality (1) then the dog may be refused entry to its destination/have to go into quarantine (1).
- There will be no issues (1) when the dog arrives/departs a country (1) as the data/information is accurate (1) and can be relied on (1).
- Any other valid suggestion. ........................................................................................................[4]

(d) Describe two consequences to the dog and its owner if the information on the dog travel paperwork is of poor quality.

1. Extra costs may be incurred if information is missing/not correct (1) as PDT will have to be contacted to supply the missing/incorrect information (1).
- The dog may be 'put to sleep' (1) if the information/microchip number on the paperwork does not match with the scanned results (1).
- The dog may be refused entry/have to stay in quarantine longer (1) if any of the information held on the paperwork is missing/incorrect (1).
- The dog may not be able to fly (1) meaning the owner may not be able to emigrate on the given date (1)

2. Any other valid suggestion. ................................................................................................... [4]
Mark Scheme Guidance

**Question 2(b):**

For 1 mark.
Correct answer only.

**Question 2(c):**

Points marking approach.
Read the whole answer and mark to the candidates advantages.

**Question 2(d):**

Max 2 consequences.
Max 2 marks per consequence (2 × 2).
Consequence can be to the dog or the owner or a mixture.

**Examiner comments**

**Question 2(b) –** The response provided for part (b) of the question demonstrated a knowledge gap relating to the different categories of information. Acceptable responses included communication or planning.

**Question 2(c) –** The focus of part (c) of the question was on the importance of the travel paperwork containing good quality information. Response were accepted where candidates provided descriptions of what could happen if the paperwork was not of good quality. Many candidates were able to provide brief responses to this part of the question that related to the different requirements of different countries, so paperwork had to include all relevant and required information and the fact that the dog may be refused entry to a country if some of the required information was missing from the paperwork.

**Question 2(d) –** Part (d) of the question focused on the consequences of poor quality information being contained in the travel paperwork. Many candidates were able to provide acceptable response to this question. However, it was evident that some candidates had failed to read the question correctly. These candidates provided responses relating to Progress DogTravel rather than consequences to the dog and its owner.
Exemplar candidate work

Question 2(d) – Low level answer

(d) Describe two consequences to the dog and its owner if the information on the dog travel paperwork is of poor quality.

1. If the information is poor it’s most likely the dog wouldn’t be able to travel. If your dog has rabies and passed it on to another person most likely he wouldn’t travel.

2. If your dog is very dangerous towards the people also if the dog can run away if he has done this before in a airport.

Commentary

This question related to bullet point 3 in the research points of the case study.

The focus of this question is on the consequences, to the dog and its owner, of poor quality information on the travel paperwork. The question is worth 4 marks, meaning that each consequence was allocated 2 marks.

This candidate has made reference in the first consequence to the dog not being able to travel. This answer fails to be further expanded to describe further details relating to the dog not being able to travel. To improve this answer, further detail relating to the identified consequence needed to be provided. Acceptable answers could include the owner completing their travel without their dog or extra costs incurred by the owner to have flights rescheduled/extra kennel costs whilst the dog is waiting to travel.

Consequence 2, as described by the candidate does not answer the question. The reference to the dog being dangerous does not meet the requirements of the question or any relation to the case study.
Exemplar candidate work

Question 2(d) – Medium level answer

Commentary

This candidate has provided one complete appropriate consequence of the information on the travel paperwork being of poor quality – the dog may be sent to the wrong destination so delaying their arrival. This is related to the destination field in the dog travel arrangements database and is directly linked to the case study, Progress DogTravel (PDT). This consequence can be confidently awarded both allocated marks.

However, the second consequence does not answer the question. The candidate has stated that if the date of the rabies injection is incorrect, the dog could get very sick. The date of the rabies vaccination is a field in the dog travel arrangements database with this date being given by the vet who gives the dog the rabies injection.

To improve this answer to a high level answer, a further correct consequence needed to be described. One acceptable answer could be that the dog may be refused entry to their destination country if any of the information is missing or inaccurate.
Exemplar candidate work

Question 2(d) – High level answer

Commentary

The candidate has provided two acceptable consequences.

The first consequence has provided a brief description relating to the fact that the dog may not be eligible to travel. The candidate has failed to provide any further descriptive detail relating to this consequence.

There is then a complete description of a second appropriate consequence in that the owner could get into trouble and fined.

To move this answer to a full mark high level answer, the candidate would need to provide further details relating to the consequence of the dog not being eligible for travel. These could include an increase in cost for the owner for extra kennel/quarantine fees or that the owner may have to delay their travel arrangements.
Question 3

**Progress DogTravel holds personal details relating to the dog and its owner. Discuss the impacts of the Data Protection Act (DPA) on Progress DogTravel when handling this personal information.**

**Indicative content**

**General points:**
- A data controller must be appointed and register with the Information Commissioner. This person is responsible for ensuring the PDT complies with the DPA.
- The 8 principles of the DPA must be adhered to when processing the personal information.
- PDT must be clear on what information about the dog and owner they are collecting, why it is being collected and what the data will be used for.
- PDT must inform the Information Commissioner as to what information is going to be held and what is to be done with it. PDT can only collect and process information which meets these specified requirements.
- PDT should only request information which is relevant to the dog’s travel arrangements. No excessive/irrelevant information should be asked for.
- Information held must be checked to ensure that it is up to date and accurate. PDT should check this prior to the dog travelling.
- When the dog has travelled and is reunited with its owners the information should be deleted.
- If information held by PDT is incorrect then the owners have a right to have this corrected.
- Security measures should be put in place by PDT to prevent the information from being deleted or stolen.
- PDT should ensure that backups of the information/database are taken regularly.
- If the country the dog is travelling to is outside the EU or to a country that does not have adequate levels of protection PDT must get the consent of the owner to transfer the information to the destination country.
- Any other valid suggestion.

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**Mark Scheme Guidance**

**Level 3: 7–10 marks**

Has shown a detailed level of understanding by discussing the impacts of the DPA. The learner provides a clear discussion of more than one clear impact which is fully applied to PDT.

Relevant examples will be used to support discussion and ideas will be expressed clearly and fluently.

There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.

**Level 2: 4–6 marks**

Has shown a good level of understanding by explaining the impact(s) of the DPA. Explanations may concentrate on one impact. At the lower end of the mark band, response may be limited in depth or descriptive. Some examples used to support discussion may not be relevant and may at times detract from fluency of narrative.

There is a line of reasoning presented with some structure. The information presented is in the most part relevant and supported by some evidence.
Level 1: 1–3 marks

Has identified points relevant to the use of DPA. Limited use of examples to accompany description and ideas will be poorly expressed.

The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.

0 marks – Nothing worthy of credit.

Examiner comments

This question was marked using a banded response method. Candidates were awarded marks based on the level of detail included in their response and the application of their response to Progress DogTravel. The question also incorporated the quality of the response in terms of correct use of technical terms and the coherent use of logical reasoning. This is denoted by the use of a * next to the question number with candidates being informed of this in the rubric on the front of the examination paper.

This question linked to bullet point 4 in the research points in the case study. It was apparent that many candidates had used previous exam papers as practice but, if this strategy is used, candidates should be aware that the focus of any question will change series on series. In addition, candidates should be reminded that any question in Section A must be answered using the case study and that their knowledge must be applied to this scenario.

The focus of the question was on the impact of the Data Protection Act (DPA). No credit was gained by candidates simply providing the eight principles of the DPA but these could be used to further explain the impact of the Act when data is being handled.

Many candidates were able to provide one impact with the most popular being that of security. This strategy enabled candidates to be awarded a mark in the middle mark band. There appeared to be a lack of understanding about the impact of handling data in relation to the DPA and relating these to the case study. Where candidates failed to provide relevant examples the accessibility of the higher marks within the middle mark band was negated.

To reach the highest mark band, candidates needed to provide a detailed discussion of more than one impact. These impacts needed to be applied to Progress DogTravel with relevant and complete examples provided.
Progress DogTravel holds personal details relating to the dog and its owner.
Discuss the impacts of the Data Protection Act (DPA) on Progress DogTravel when handling this personal information.

Progress DogTravel has to secure the data keeping it safe. By doing this Progress DogTravel has to have a safe/secure internet along with secured levels among that internet. This will ensure that data will not be hacked, edited, or deleted by unauthorised beings.

Progress DogTravel will have to periodically send a copy of their data to its underline to validate the information so the integrity of the data can still be valid along with it being good quality information.

Progress DogTravel has to ensure to only share information with counter that also follow the DPA code. If not their customer information may be used for illegal intent and could count fraud.
Commentary

This question related to bullet point 4 in the research points of the case study.

The question was marked using a levels of response method. The level awarded related to the level of detail included, the application of the response to Progress DogTravel (PDT) and the quality of the written communication, including the use of technical terms. Where the quality of the response is to be considered when the script is being marked is denoted by a * next to the question number. Candidates are informed of this on the front cover of the question paper in the section labelled 'Information'.

The candidate has provided an answer that considers the security of the information held, the need to keep this up-to-date and sharing information. Whilst these are all valid points and can be related to the Data Protection Act (DPA) there is little, if any, consideration of the impacts to PDT of holding personal information. In addition, the answer is descriptive rather than the discussion as required by the question.

A medium level answer, of which this is an example, comprises of descriptions with limited reference to the case study, in this case, PDT.

To move this to a high level answer, the answer should be an explanation which, at times, moves into a discussion. The positive and negative impacts of PDT adhering to the DPA should be considered. The narrative should include specific examples that can be directly related to PDT.

For example, taking the point made about only sharing information with other countries who also follow the DPA code, the final paragraph of the exemplar answer. In the case study it is shown that PDT arrange travel for dogs all over the world – the example destinations given in the excerpt from the database shows dogs travelling to Paris, Antigua and Jordan. Therefore, a negative impact of PDT adhering to the DPA is that information does have to be shared with countries that do not follow the equivalent of the DPA. An example of how this impacts PDT could include the fact that an increased level of security of the information must be considered which may mean that PDT may incur extra costs to ensure this increased level of security.
Exemplar candidate work

Question 3 – High level answer

3* Progress DogTravel holds personal details relating to the dog and its owner. Discuss the impacts of the Data Protection Act (DPA) on Progress DogTravel when handling this personal information.

[10]

They must comply with every principle of the DPA. One example is that they can only keep the information relating to the owner and dog for as long as is necessary. This means if the owner will not use Progress Dogtravel, instructor information about them needs to be removed.

Another principle to consider is that the personal information is thoroughly protected. This is because the information is private, and there are a lot of negative consequences if the owner’s data was leaked. This means Progress Dogtravel have to implement different forms of protection such as encrypting the documents as this means if leaked attackers may not get access to the files.

The DPA also means Progress Dogtravel are unable to transport data to countries with weaker data laws than the UK. This is because of the consequences that could occur if data gets leaked in a foreign country.

The personal information must also be accurate; otherwise, confusion could occur. This can be prevented by using verification...
Commentary

The candidate has provided an answer that includes reference to some of the principles of the DPA and how PDT can follow these. A reasonable attempt has been made to provide a discussion which includes superficial reference to more than one impact. There are examples provided, but some of these are limited in application to PDT. As such, the answer is a high level answer, but at the lower end of the high level band.

To be considered a full mark high level answer, all examples provided need to be specific to PDT. In addition to this, the answer needs to be a clear discussion of the impacts of the DPA on PDT holding personal information.

For example, one of the points made in the answer is that personal information needs to be protected. The candidate then goes on to say that PDT have to implement different security measures with an example of encryption given. To meet the requirements of a full mark high level answer, an impact of the implementation of the security measures should be given and discussed. For example, the increased cost of the security measures in terms of extra hardware/software that may need to be purchased or the increased costs of training staff to implement the security measures.

Also included in this part of the answer is the comment that there will be negative consequences if the owners’ information was leaked. To fully meet the requirements of a full mark high level answer, some examples and further details about these negative consequences should be included. For example, the owners can claim compensation from PDT if their information is leaked with further details relating to the possible impact to PDT of having security breeched and personal information being put into the ‘public domain’. These further details could include the loss of reputation as customers will no longer trust PDT to keep their details secure. This in turn may lead to a reduction in business which could ultimately lead to PDT going out of business.
Questions 4 and 5

4 The dog’s travel paperwork can be uploaded to an online storage area.

Identify one method which could be used to maintain the confidentiality of this information. Justify your choice.

Method

- (User names and) Passwords (1st) When combined with user names secures the on-line areas (1) as only those with the correct/matching user name / password (1) can access the secure location of the storage area/documents (1).

Justification

- Encryption (1st) Uses an algorithm to convert the text to an unreadable format (1) Documents can be encrypted so only those with the correct key (1) will be able to read the documents (1).
- Document password (1st) provides 2nd level security (1) if unauthorised persons accessed the on-line storage area (1) the document password would stop them accessing the actual document/the contents of the document would be secure (1).
- Any other valid suggestion.

5* Progress DogTravel has organised travel for dogs to remote countries such as Haiti and Peru.

Discuss, using examples, the issues which could arise if the paperwork for a dog travelling to a remote destination was stored on an online storage area.

Indicative content

- Limited internet access – leading to the possibility of a dog arriving at the destination but the paperwork cannot be downloaded due to a lack of service.
- Slow download speeds – the speed of download may lead to the paperwork taking a long time to access. If the file size is large, then this may cause the download to ‘hang’ with the paperwork not being completely downloaded.
- Interrupted downloads – internet access may be intermittent, due to location, which may mean that only part of the paperwork is downloaded and the process may have to be started again.
- No internet access – when the dog arrives at the destination there may be no internet access meaning the dog cannot be given back to their owners or move to quarantine as the identity cannot be confirmed.
- Limited access to paperwork may occur as internet access may fail when accessing the on-line storage area.
- Country may have Internet access but destination in the country may not/be limited.
- Some countries do not have strict regulations relating to security and so documents may be more susceptible to hacking
- Any other valid suggestion.
Mark Scheme Guidance

Question 4:
Points marking approach.
The method must be correct and appropriate to PDT to be awarded the justification marks.

Question 5:

Level 3: 7–10 marks
Has shown a detailed level of understanding by discussing the issues of remote locations and accessing paperwork. The learner provides a clear discussion of more than one clear issue. Relevant examples will be used to support discussion and ideas will be expressed clearly and fluently.

There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.

Level 2: 4–6 marks
Has shown a good level of understanding by explaining the issue(s) of remote locations and accessing paperwork. Explanations may concentrate on one issue. At the lower end of the mark band, limited depth or descriptive. Some examples used to support discussion may not be relevant and may at times detract from fluency of narrative.

There is a line of reasoning presented with some structure. The information presented is in the most part relevant and supported by some evidence.

Level 1: 1–3 marks
Has identified points relevant to the issue(s) of remote locations and accessing paperwork. Limited use of examples to accompany description and ideas will be poorly expressed.

The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.

0 marks – Nothing worthy of credit.

Examiner comments

Question 4 – The focus of this question was on a method that could be used to maintain the confidentiality of information uploaded to an online storage area. Candidates needed to identify a suitable method, justifying their choice. This question linked to part of bullet point 5 in the research points in the case study.

If candidates failed to identify a suitable method then they were unable to access the marks allocated for the justification.

Many candidates provided an acceptable method and so were able to access the justification marks. Acceptable methods included passwords and encryption. Many candidates failed to justify their choice of method with many responses simply describing the method.

Question 5 – This question was marked using a banded response method. Candidates were awarded marks based on the level of detail included in their response and the application of their response to Progress DogTravel. The question also incorporated the quality of the response in terms of correct use of technical terms and the coherent use of logical reasoning. This is denoted by the use of a * next to the question number with candidates being informed of this in the rubric on the front of the examination paper. This question linked to part of bullet point 1 in the research points in the case study.

The focus of this question was on the issues which could arise with the paperwork being stored in an online storage area for those dogs travelling to a remote location.

To be awarded a mark in the middle mark band candidates needed to provide an explanation of at least one issue that could arise. Examples also needed to be provided which related to the case study, Progress DogTravel.

Many candidates were able to provide a brief explanation of at least one issue that could arise. The most common issue was that of internet access and how this could be intermittent or not available in the remotest parts of the world. However, many candidates were unable to provide further details as to how this would impact on Progress DogTravel.
The level of detail provided was the main discriminator between the middle and top mark band. To be considered for a mark in the highest mark band candidates needed to have considered more than one issue with a detailed explanation.

In addition to these requirements for the highest mark band candidates needed to provide relevant and specific examples relating to Progress DogTravel. For example, candidates who had considered the destination of dog, were able to provide examples relating to the intermittent and patchy internet access that can affect a remote country and how these can lead to it being difficult to ascertain the validity of the information held in the travel paperwork.
Question 6

Section B

You do not need the case study to answer these questions.

6 A library is removing borrowers from its database who have not borrowed a book for three or more years.

(a) Identify the data analysis tool which would be used to complete this task. Justify your choice.

Data analysis tool

Justification

• Data cleaning (1st).

(b) Describe one disadvantage to the borrowers if the data is not removed safely from the database.

• Data could be accessed by hackers/unauthorised users (1) leading to identity theft (1).
• Data could be accessed by unethical organisations / fraudsters (1) and used to spam/target the borrower (1).
• Any other valid suggestion.

Mark Scheme Guidance

Question 6(a):

Points marking approach.

The data analysis tool must be correct to enable marks for the justification to be awarded.

Question 6(b):

Points marking approach.

One disadvantage from list
Examiner comments

Candidates did not need to apply their responses to Progress DogTravel in this section of the external examination.

The focus of this question was on a library removing data from a database and the implication of this process not being carried out safely.

Part (a) of the question required candidates to identify the data analysis tool that could be used to locate and remove data for a given scenario. If candidates failed to provide a correct data analysis tool, they were unable to access the marks allocated for the justification. Some candidates were able to identify an appropriate data analysis tool that could be used to carry out this process – data cleansing/data tables. Again, candidates were unable to justify their choice of data analysis tool in the context of the question and so were unable to access all the allocated marks. However, it was evident that many candidates had a knowledge gap relating to the different types of data analysis tools.

Part (b) of this question required candidates to describe one disadvantage to the borrowers of the library if the data is not removed safely from the database. Many candidates were able to access the marks allocated for this part of the question by providing a description that related to how hackers/fraudsters could access the information and how this could lead to identity theft.
Questions 7(a) and (b)

7 Stored data and information must be kept secure by organisations.

(a) Explain two impacts on an organisation of keeping data and information secure.

1. • Increased reputation (1) as a trustworthy organisation (1).
   • Increased customer base (1) as customers move from organisations who have had data security breaches (1).
   • Data subjects will be more willing to provide their data (1) as they know it will be kept secure (1).
   • Business will operate smoothly/efficiently (1) as all data required will be available (1)

2. • Increased costs (1) for investing in security (1)
   • Increase business partners (1) as perceived to be a reputable company (1)
   • Any other valid suggestion.

(b) Data and information can be intentionally destroyed.

Identify and describe two methods which could be used to intentionally destroy data and information.

1. • Virus (1st) a type of malicious software code that can reproduce itself (1) destroying/infecting data files or programs (1).
   • Hacking/Hacker (1st) finding a weakness in a system (1) to access sensitive/confidential/personal information (1).
   • Electromagnetically wiped (1st) all data from a storage device is wiped (1) so cannot be accessed (1)
   • Physical destruction (1st) of storage device (1) to ensure data cannot be accessed (1)
   • Burning/shredding (1st) physical data (1) to remove any trace of data (1)
   • Any other valid suggestion.

2. • [ Further details not provided in the image ]
Mark Scheme Guidance

Question 7(a):
Points marking approach.
2 from list.
Accept responses relating to the impact of not keeping data/information secure.

Question 7(b):
Points marking approach.
2 from list for up to 3 marks each Method (1) Process (1) Result (1).
The method must be correct to enable marks for the description to be awarded.

Examiner comments

Question 7(a) – The focus of this question was on the securing of data and information held by an organisation. Part (a) of the question related to the impacts on an organisation of keeping data and information secure. Most candidates were able to provide explanations of two impacts that could be the result of keeping data and information secure. Acceptable responses included an increase in customer base as the organisation is perceived to be trustworthy and there may be an increase in costs as security software/hardware and the maintenance of these can be expensive.

Question 7(b) – Part (b) of the question required candidates to identify and describe two methods that could be used to intentionally destroy data and information. Many candidates were able to gain high marks for this part of the question. Acceptable responses included burning/shredding of paper-based documents and electromagnetically wiping storage devices.
Questions 7(c) and (d)

(c) Describe how encrypting the data at rest could be used to keep the data secure.

- If computer system is hacked (1) it will be unreadable without the encryption key (1).
- Any other valid suggestion.

............................................................................................................................................[2]

(d) Some data can be partially anonymised.

(i) Explain what is meant by the term partially anonymised.

- Part of the data (1) is replaced by a symbol/example of symbol (1).

............................................................................................................................................[2]

(ii) Partially anonymise the data 1124 1451 9998 1103 below.

- Data Partially anonymised (1).
- Example
- Addition of symbols which partially anonymise the data/part of original data still present but some has been replaced by symbols.

............................................................................................................................................[1]

Mark Scheme Guidance

Question 7(c):
Points marking approach.

Question 7(d)(i):
Correct answer only.
Points marking approach.

Question 7(d)(ii):
Points marking approach.
To be awarded the mark for anonymised data this must be identifiable as the original data.
Examiner comments

Question 7(c) – Part (c) of this question required candidates to describe how encrypting data at rest could maintain its security. Many candidates were able to access one mark for describing how the data would be unreadable by anyone who did not have the encryption key. However, they failed to access the other allocated mark as they focussed their response on the data being in transit.

Question 7(d) – Part (d) of the question required candidates to explain what is meant by ‘partially anonymised’ with them then having to partially anonymise a given set of data. Many candidates were able to access one mark for the explanation of the term by providing a response relating to the fact that part of the data is hidden/changed into something else.

The further allocated mark was awarded for the candidates defining what could be used when this process is taking place. Most candidates were able to correct partially anonymise the given data set, accessing the one allocated mark. However, many candidates provided an answer that simply reworded the question. This strategy limited the accessibility to the allocated marks.
Question 8

8 Compare the use of the information styles braille text and tactile images.

<table>
<thead>
<tr>
<th>Braille text</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• is used for documents (1).</td>
<td></td>
</tr>
<tr>
<td>• generated through the use of a braille printer (1)</td>
<td></td>
</tr>
<tr>
<td>• Is a series of dots (1).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tactile images</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• used for photographs/maps/images (1).</td>
<td></td>
</tr>
<tr>
<td>• generated through the use of software which creates raised lines (1).</td>
<td></td>
</tr>
<tr>
<td>• Makes a ‘feelable’ image (1)</td>
<td></td>
</tr>
<tr>
<td>• Any other valid suggestion.</td>
<td></td>
</tr>
</tbody>
</table>

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Mark Scheme Guidance

4 marks – 2 complete comparisons.

3 marks – 1 comparison + 1 point about either side.

2 marks – 1 complete comparison.

1 marks – 1 point about either side.

Examiner comments

This question required candidates to compare the use of braille text and tactile images.

Many candidates were able to provide at least one correct point about both braille text and tactile images, so being awarded two marks. To achieve two marks a correct point about both styles needed to have been made. If points had just been made about either braille text or tactile images, then a maximum of one mark could be awarded. To be awarded the full allocated marks for this question, two complete comparisons needed to be made.

Many candidates, however, provided vague answers that related to the user having limited vision or that tactile images were used by the NASA Hubble Space Telescope but failed to apply this to its use.
Exemplar candidate work

Question 8 – Medium level answer

8 Compare the use of the information styles braille text and tactile images.

Braille text is where dots that form certain signs which is used by visually impaired to read while tactile images are raised up surfaces which form the shape of the image.

Commentary

This question required candidates to compare two different information styles – braille text and tactile images. To be confidently awarded all allocated marks, 4 candidates needed to provide two complete comparisons, each worth 2 marks.

This candidate has provided one complete comparison. They have correctly identified that braille text is made up of dots which enable a user to read and then gone onto state that tactile images are raised up surfaces.

This is a good comparison that considers the format of each of the specified information styles. To improve the answer to a high level answer, the candidate needed to expand their answer to provide another complete comparison.

This additional comparison could include, for example, the fact that braille text is used on paper-based documents whilst tactile images are used for increasing the accessibility of photographs or maps to people with a visual impairment.
Question 9

9 Individuals have a right of access to information held about them by public bodies.

(a) Identify the Act that contains this right of access.

- Data Protection Act/DPA (1). [1]

(b) Describe two actions which must be taken when a right of access request is made.

1. The (data controller of the) organisation should be written to (1) detailing what information is required (1).
   - An administrative charge (1) should be paid to the organisation (1).
   - The information requested should be provided (1) within a reasonable amount of time/within 40 days (1).
   - Verify/confirm (1) the identity of the applicant (1)
   - Any other valid suggestion.

2. ..........................................................................................................................................................

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..........................................................................................................................................................
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[4]

Mark Scheme Guidance

Question 9(a):
Correct answer only.

Question 9(b):
Points marking approach.
2 from list.

Examiner comments

This question required candidates to identify an Act from a given context and describe actions that need to take place when a rights of access request is made.

Many candidates failed to identify the correct Act, part (a), with many providing Freedom of Information as their response. The correct Act was the DPA, in that the information being requested is the information held about a person. Many candidates demonstrated a knowledge gap relating to the actions that should be taken when a right of access request is made. Actions that need to be taken include the verification of the identity of the person making the request and that the request has to be made in writing detailing what information is required.
Question 10

Many organisations have employees who work remotely.

(a) Identify **two ways a secured online area could be used by employees to communicate.**

1. Web conferencing (1)
2. Document sharing/collaborative areas (1)
   
   • Video messages (1)
   • Instant messages (1)
   • Shared diaries (1)
   • Project planning (1)
   • Email (1)
   • Any other valid suggestion

(b) Explain **two benefits of using a secured online area for communication.**

1. Security will be high (1) as only people who have access credentials (1) can access the online area (1)
   • if employees are logged into the secure area (1) instant communication can take place (1) as secure online messages can be used (1)
   • Real time conversations (1) can take place when employees are logged on (1) which is better than trying to explain an issue/task in words via email (1)
   • Documents/plans (1) can be shared via the area (1) so that they can be used during web conferences/video calls (1)
   • Meetings can be scheduled (1) as diaries (1) can be shared amongst all employees (1)
   • Any other valid suggestion

Mark Scheme Guidance

**Question 10(a):**

Points marking approach.
2 from list.

**Question 10(b):**

Points marking approach.
2 from list.
Examiner comments

Candidates were required to identify two ways a secured online area could be used by employees who work remotely and then going on to explain two benefits of the use of this for communication.

Most candidates were able to provide at least one way this online area could be used, part (a) of the question. Acceptable responses included emails, document sharing and project planning. Many candidates provided answers that related to social media so demonstrating a knowledge gap about this part of the unit specification.

The response provided for part (b) of the question demonstrated a knowledge gap with many candidates providing responses relating to the fact that the area can help people work at home. This was given in the stem of the question and so gained none of the allocated marks. Acceptable benefits of using this type of area for communication include that the area can be used to share documents which can be stored securely and can be used during web or video conferences or that secure face-to-face conversations can be scheduled which can help communication as its more beneficial to speak about an issue rather than having to explain things in words.
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