

Cambridge Technicals

IT

Unit 2: Global information

Level 3 Cambridge Technical Certificate/Diploma in IT
05838-05842, 05877

Mark Scheme for January 2017

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

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Question	Answer	Marks	Guidance
1	<p>Advantages</p> <ul style="list-style-type: none">• Can be written on/amended (1) if any urgent changes need to be made (1).• Cleaning staff do not need to have a computer/device (1) to read their daily schedule (1).• Schedules can be referred to during the day (1) without needing an internet/Wi-fi connection (1).• Any other valid suggestion. <p>Disadvantage</p> <ul style="list-style-type: none">• Can be easily lost/misplaced (1) meaning cleaning staff will have to phone office / get another copy (1).• Text on paper can become illegible (1) for example if paper gets wet (1).• Any other valid suggestion.	6	<p>Points marking approach The focus of the question is on the cleaning staff Do not allow backups</p>

Question		Answer	Marks	Guidance
2	(a)	<ul style="list-style-type: none"> • Service code (1) which is unique for each different service/example given (1). • Invoice number (1) total amount per invoice/amount owed (1). • Prices (1) of services / example given (1). • Client ID (1) these are linked to client contact details (1). 	2	Points marking approach
2	(b)	(i) <ul style="list-style-type: none"> • Cloud storage device. 	1	For 1 mark Accept examples of brand names Do not allow mobile phone app
	(b)	(ii) <ul style="list-style-type: none"> • Manageability (1) Minimal resources will be needed (1) • Access method (1) access through secure log-in details (1). • Accessibility (1) access available at any time (1). • Location (1) documents can be accessed from anywhere with an internet connection (1). 	2	Points marking approach Can only be awarded marks if marks awarded for 2b(i)
	(c)	(i) <p>Method</p> <ul style="list-style-type: none"> • Locking of spreadsheet (1). • Any other valid suggestion. <p>Justification</p> <ul style="list-style-type: none"> • Only one person can make edits (1). • this will stop the data becoming incorrect (1). • changes can be made before unlocking (1). • Updated information will held in the spreadsheet (1). • The information held will be the most up-to-date and will include all edits (1). • Any other valid suggestion. 	4	The method must be correct to enable marks for the justification to be awarded. 1 mark for method, up to 3 for justification Accept locking of a component of a spreadsheet Do not allow encryption / passwords

Question		Answer	Marks	Guidance
	(c) (ii)	<ul style="list-style-type: none">• Edits will only be made by one person (1) at a time (1).• Edits will be saved before unlocking the spreadsheet (1) .this enables the data to be up-to-date and accurate (1).• The data held in the spreadsheet will be complete (1) and fit-for-purpose (1) so client invoices will be correct (1).• Any other valid suggestion.	4	Points marking approach

Question	Answer	Marks	Guidance								
3	<p>Indicative content</p> <ul style="list-style-type: none"> When presenting numerical data text can become confusing for the reader. A graph/chart can provide a better understanding to the reader. Visual learners can understand a graph/chart more easily than a series of numbers. Graphs / charts can summarise data and make it easier to interpret. The type of chart must be carefully considered based on the data being shown. Graphs / charts must be correctly labelled to enable the reader to fully understand the data being shown. Text can be used to provide a summary of the data. If narrative / facts are included in the report then these are better shown as text. The format of the text, e.g. bullets, can be changed to suit the text contents. For example, a bulleted list can be used to provide examples. 	7	<p>Levels of response marking approach</p> <table border="1"> <tr> <td data-bbox="1370 260 1563 507">5 - 7 marks</td> <td data-bbox="1574 260 2072 507"> <p>Candidate has shown a detailed level of understanding discussing how text, graphs and charts could be used in the reports.</p> <p>Relevant examples will be used to support discussion and ideas will be expressed clearly and fluently.</p> </td> </tr> <tr> <td data-bbox="1370 515 1563 970">3 – 4 marks</td> <td data-bbox="1574 515 2072 970"> <p>Candidate has shown a good level of understanding explaining how text, graphs and charts could be used in the reports although the explanation could be one-sided.</p> <p>Some example(s) will be used to support explanations which may not be relevant and may at times detract from the fluency of narrative.</p> <p>At the bottom of the mark band the candidate may have described a single point related to how text, graphs and charts could be used.</p> </td> </tr> <tr> <td data-bbox="1370 978 1563 1313">1 – 2 marks</td> <td data-bbox="1574 978 2072 1313"> <p>Candidate has identified points relevant to how text, graphs and charts could be used in the reports.</p> <p>Limited use of examples to accompany description and ideas will be poorly expressed.</p> <p>At the bottom of the mark band, a single point may be identified with an example.</p> </td> </tr> <tr> <td data-bbox="1370 1321 1563 1377">0 marks</td> <td data-bbox="1574 1321 2072 1377">Nothing worthy of credit.</td> </tr> </table>	5 - 7 marks	<p>Candidate has shown a detailed level of understanding discussing how text, graphs and charts could be used in the reports.</p> <p>Relevant examples will be used to support discussion and ideas will be expressed clearly and fluently.</p>	3 – 4 marks	<p>Candidate has shown a good level of understanding explaining how text, graphs and charts could be used in the reports although the explanation could be one-sided.</p> <p>Some example(s) will be used to support explanations which may not be relevant and may at times detract from the fluency of narrative.</p> <p>At the bottom of the mark band the candidate may have described a single point related to how text, graphs and charts could be used.</p>	1 – 2 marks	<p>Candidate has identified points relevant to how text, graphs and charts could be used in the reports.</p> <p>Limited use of examples to accompany description and ideas will be poorly expressed.</p> <p>At the bottom of the mark band, a single point may be identified with an example.</p>	0 marks	Nothing worthy of credit.
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Question	Answer	Marks	Guidance						
4*	<p>Indicative content</p> <ul style="list-style-type: none"> • Usernames and passwords – clients & office staff have unique secure identifications • Access levels - office staff may be able to upload and edit accounts, clients may only access and read /download their own invoices. • Access levels – based on user names & passwords • Two-way authentication - when the user and the computer system engage in a two-way, question-and-answer exchange. • Multi-layer firewalls – to stop unauthorised / unknown access to data • Any other valid suggestion 	10	<p>Levels of response marking approach</p> <table border="1"> <tr> <td data-bbox="1370 284 1487 715">7 - 10 marks</td> <td data-bbox="1487 284 2065 715"> <p>Candidate has shown a detailed level of understanding by discussing more than one security method which could be used to maintain the security of data on the shared device.</p> <p>Relevant examples will be used to support discussion and ideas will be expressed clearly and fluently.</p> <p><i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p> </td> </tr> <tr> <td data-bbox="1370 715 1487 1273">4 – 6 marks</td> <td data-bbox="1487 715 2065 1273"> <p>Candidate has shown a good level of understanding by explaining at least one of the security methods which could be used to maintain the security of data on the shared device.</p> <p>Some example(s) will be used to support explanations which may not be relevant and may at times detract from the fluency of the narrative.</p> <p>At the bottom of the mark band the candidate may have described a single security method.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is for the most part relevant and supported by some evidence.</i></p> </td> </tr> <tr> <td data-bbox="1370 1273 1487 1394">1 – 3 marks</td> <td data-bbox="1487 1273 2065 1394"> <p>Candidate has identified point(s) relevant to the security method which could be used.</p> </td> </tr> </table>	7 - 10 marks	<p>Candidate has shown a detailed level of understanding by discussing more than one security method which could be used to maintain the security of data on the shared device.</p> <p>Relevant examples will be used to support discussion and ideas will be expressed clearly and fluently.</p> <p><i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p>	4 – 6 marks	<p>Candidate has shown a good level of understanding by explaining at least one of the security methods which could be used to maintain the security of data on the shared device.</p> <p>Some example(s) will be used to support explanations which may not be relevant and may at times detract from the fluency of the narrative.</p> <p>At the bottom of the mark band the candidate may have described a single security method.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is for the most part relevant and supported by some evidence.</i></p>	1 – 3 marks	<p>Candidate has identified point(s) relevant to the security method which could be used.</p>
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					<p>Limited use of examples to accompany description and ideas will be poorly expressed.</p> <p>At the bottom of the mark band, a single security method may be identified with an example.</p> <p><i>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.</i></p>
				0 marks	Nothing worthy of credit.

Question		Answer	Marks	Guidance
5	(a)	<ul style="list-style-type: none"> • To use computers / IT resources (1) in an efficient/ environmentally responsible way (1) and to reduce waste by recycling resources / computers / giving to charity for reuse (1). • To reduce carbon footprint (1) • becoming eco-friendly (1) 	3	Points marking approach
	(b)	<ul style="list-style-type: none"> • To consider before printing (1) and printing only what is required (1). • To switch off computer/equipment (1) rather than leaving them on stand-by (1). • To recycle (1) ink cartridges/paper (1). • To store documents centrally/on the cloud (1) instead of printing and storing (1). • Any other valid suggestion. 	4	Points marking approach

Section B

Question		Answer	Marks	Guidance
6	(a)	<ul style="list-style-type: none"> • What information is needed (1) needs to be specifically defined (1). • If this isn't defined correctly (1) then the information collected may be not what is needed/.worthless (1) • The purpose of the data analysis (1) needs to be correctly defined (1). • If this is incorrectly defined (1) then the process of data analysis will produce worthless information/results (1) • Any other valid suggestion. 	6	Points marking approach
	(b)	<ul style="list-style-type: none"> • Information is in context (1) whilst data has no context (1). • Information is data which has been coded / structured (1). • Data needs to be processed to become information (1). 	2	Points marking approach To be awarded full marks the difference must be provided

Question	Answer	Marks	Guidance						
7*	<p>Indicative content</p> <ul style="list-style-type: none"> Intercepting communications, such as the content of telephone calls, emails or letters. Acquiring communications data: the ‘who, when and where’ of communications, such as a telephone billing or subscriber details. Conducting covert surveillance, either in private premises or vehicles (intrusive surveillance) or in public places (directed surveillance). The use of covert human intelligence sources, such as informants or undercover officers. Access to electronic data protected by encryption or passwords. 	10	<p>Levels of response marking approach</p> <table border="1"> <tbody> <tr> <td data-bbox="1368 300 1487 730">7 - 10 marks</td> <td data-bbox="1487 300 2069 730"> <p>Candidate has shown a detailed level of understanding by discussing how a government organisation could use RIPA to maintain national security.</p> <p>Relevant examples will be used to support discussion and ideas will be expressed clearly and fluently.</p> <p><i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p> </td> </tr> <tr> <td data-bbox="1368 730 1487 1161">4 – 6 marks</td> <td data-bbox="1487 730 2069 1161"> <p>Candidate has shown a good level of understanding by explaining how a government organisation could use RIPA to maintain national security.</p> <p>Some example(s) will be used to support examples which may not be relevant and may at times detract from the fluency of the narrative.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is for the most part relevant and supported by some evidence.</i></p> </td> </tr> <tr> <td data-bbox="1368 1161 1487 1412">1 – 3 marks</td> <td data-bbox="1487 1161 2069 1412"> <p>Candidate has identified point(s) relevant to the use of RIPA by a government organisation.</p> <p>Limited use of examples to accompany description and ideas will be poorly expressed.</p> </td> </tr> </tbody> </table>	7 - 10 marks	<p>Candidate has shown a detailed level of understanding by discussing how a government organisation could use RIPA to maintain national security.</p> <p>Relevant examples will be used to support discussion and ideas will be expressed clearly and fluently.</p> <p><i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p>	4 – 6 marks	<p>Candidate has shown a good level of understanding by explaining how a government organisation could use RIPA to maintain national security.</p> <p>Some example(s) will be used to support examples which may not be relevant and may at times detract from the fluency of the narrative.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is for the most part relevant and supported by some evidence.</i></p>	1 – 3 marks	<p>Candidate has identified point(s) relevant to the use of RIPA by a government organisation.</p> <p>Limited use of examples to accompany description and ideas will be poorly expressed.</p>
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					<p>At the bottom of the mark band, a single point related to RIPA may be identified with an example.</p> <p><i>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.</i></p>
				0 marks	Nothing worthy of credit.

Question		Answer	Marks	Guidance
8	(a)	<ul style="list-style-type: none"> A source of data which comes from outside (1) an organisation / system (1). 	2	Points marking approach
	(b)	<ul style="list-style-type: none"> Supplier price list (1). Supplier webpages (1). Retailer magazine (1). Any other valid suggestion. 	1	For 1 mark
8	(c)	<ul style="list-style-type: none"> Validity (1st) the information should be up-to-date (1) as old information may not be valid (1). Bias (1st) the information should not be taken from one source (1) as the collectors of the information may have collected this for a specific purpose (1). Reliability (1st) should be selected / gathered from a source which can be verified (1) example provided / e.g BBC. Relevant (1st) information should only be what is required (1) as incorrect/inappropriate/irrelevant information will not assist in making decisions (1). Accurate (1st) correct information should be gathered and used (1) as inaccurate information may provide false results (1). 	3	<p>1st mark for identification, 2 further marks for description.</p> <p>Identification mark must be awarded before description marks awarded</p>

Question		Answer	Marks	Guidance
9	(a)	<ul style="list-style-type: none"> The Internet (1) which is a public technology / has open access (1). 	2	Points marking approach
	(b)	<ul style="list-style-type: none"> Business (1). 	1	For one mark
	(c)	<ul style="list-style-type: none"> To ensure on-line bookings made (1) are confirmed (1) Loyalty scheme (1) put points against the correct account (1). Marketing / publicity (1) to advise of any special offers. To update/inform guests (1) regarding changes to room/dinner reservations (1). Any other valid suggestion. 	2	Points marking approach
	(d)	<ul style="list-style-type: none"> Multilingual (1) do not need to fully understand the language to understand what to do (1). Can be used to provide visual cues (1) e.g. red cross for incorrect information entered (1). Any other valid suggestion. 	4	Points marking approach
	(e)	<ul style="list-style-type: none"> Loss of reputation (1) guests would feel unhappy with their personal details being stolen (1). Financial loss (1) reduction in guests using the hotel / booking system (1). Payment of compensation (1) guests could sue the hotel if their identities were stolen (1). Penalties from ICO (1) due to failure to protect personal details / breaking DPA (1). Any other valid suggestion. 	4	Points marking approach Do not accept generic answers e.g. lose money

OCR (Oxford Cambridge and RSA Examinations)
1 Hills Road
Cambridge
CB1 2EU

OCR Customer Contact Centre

Education and Learning

Telephone: 01223 553998

Facsimile: 01223 552627

Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

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OCR (Oxford Cambridge and RSA Examinations)
Head office
Telephone: 01223 552552
Facsimile: 01223 552553

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