



Oxford Cambridge and RSA

Cambridge Technicals IT

Unit 2: Global information

Level 3 Cambridge Technical in IT
05838 – 05842 & 05877

Mark Scheme for June 2022

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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.

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MARKING INSTRUCTIONS**PREPARATION FOR MARKING****TRADITIONAL**

Before the Standardisation meeting you must mark at least 10 scripts from several centres. For this preliminary marking you should use **pencil** and follow the **mark scheme**. Bring these **marked scripts** to the meeting.

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 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 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.

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 lined pages 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 an annotation to confirm that the work has been seen.
7. There is a NR (No Response) option. Award NR (No Response)
 - if there is nothing written at all in the answer space
 - OR if there is a comment which does not in anyway relate to the question (e.g. 'can't do', 'don't know')
 - OR if there is a mark (e.g. a dash, a question mark) which isn't an attempt at the question
 Note: Award 0 marks - for an attempt that earns no credit (including copying out the question)
8. Assistant Examiners will email a brief report on the performance of candidates to your Team Leader (Supervisor) by the end of the marking period. Your report should contain notes on particular strength displayed as well as common errors or weaknesses. Constructive criticism of the question paper/mark scheme is also appreciated.
9. For answers marked by levels of response:
 - a. **To determine the level** – start at the highest level and work down until you reach the level that matches the answer
 - b. **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. Annotations - These are the annotations to be used when marking Unit 2:

Annotation	Meaning
	Tick – correct answer
	Cross – incorrect answer
	Plus – use for positives
	Minus – use for negatives
L1	Level 1
L2	Level 2
L3	Level 3
BOD	Benefit of doubt
^	Omission mark
V	Too vague
R	Repeat
 or 	Noted but no credit given

Question	Answer	Marks	Guidance
1	<p>Possible advantage of the 360 virtual tours being streamed could include:</p> <ul style="list-style-type: none"> • Instant playback (1) customers can start viewing the cottage quickly (1) • Customers can check the cottage meets their requirements (1) before booking (1) • Files do not have to be downloaded (1) so the tour file will not take up space on digital device / as the file is stored on PHHC server (1) • Any other valid suggestion. <p>Possible disadvantage of the 360 virtual tours being streamed could include:</p> <ul style="list-style-type: none"> • Buffering may occur (1) if the broadband speed is not high enough (1) • Customers who have limited access (1) may not be able to stream the tours (1) • Customers need (1) broadband access to stream the tours (1) • If using on a data plan (1) not enough data is available to stream all the tour (1) • Customers device may not be able to run the software (1) required to stream the tour (1) • Any other valid suggestion. 	4	<p><i>Up to two marks for each of two descriptions.</i></p> <p><i>1 advantage described.</i> <i>1 disadvantage described.</i></p> <p><i>Read whole answer & mark to candidate's advantage.</i></p>

Question		Answer	Marks	Guidance
2		<p>Possible explanation of why the link is included in the external information source category to include:</p> <ul style="list-style-type: none"> • User is directed (1) to an external website (1) • When the link is activated by the customer (1) a different browsing window is available (1) • The converter is <u>not</u> part (1) of the PHHC website (1) • The convertor is outside of PHHC/organisation (1) with the figures being sent back to the customer (1) through the PHHC website (1) • Any other valid suggestion. 	3	<p>Up to three marks for explanation.</p> <p>DNA the convertor website is not owned by PHHC as is TV which website they are referring to.</p>
3	(a)	(i) <p>For one mark:</p> <ul style="list-style-type: none"> • Privacy and Electronic Communications Regulation (1) • DPA/GDPR (1) 	1	For one mark.
3	(a)	(ii) <p>Explanation of two actions that PHHC should take to comply with this regulation to include:</p> <ul style="list-style-type: none"> • To only contact customer (1) if box has been ticked (1) / not to contact customer (1) if box has not been ticked (1) • To <u>only</u> use (1) the methods (1) that have been selected by customer (1) • To display (1) their telephone number (1) if contacting a customer by phone (1) • if cookies (1) are set on the website (1) explaining what they will do and why (1) • To inform customers that they will be sent marketing materials unless they opt out (1) so that the customer is aware that they will receive marketing materials (1) • Any other valid suggestion 	6	<p>Up to three marks each for two actions explained.</p> <p>To be considered for marks for part (ii) marks must have been awarded in part (i)</p> <p>Read whole answer and mark to candidate's advantage.</p> <p>Accept generic actions such as data should not be kept for longer than required, keep data secure etc.</p>

Question		Answer	Marks	Guidance
3	(b)	<p>For one mark:</p> <ul style="list-style-type: none">• Boolean (1st) <p>Possible justification of data type to include:</p> <ul style="list-style-type: none">• The box <u>only</u> (1) has two options (1)• Opt-out if ticked (1) opt-in if left unticked (1)• Any other valid suggestion	3	<p>1st Mark – Identification of correct data type</p> <p>2nd / 3rd Marks – Justification of choice of data type.</p> <p><i>Read whole answer and mark to candidate's advantage.</i></p>

Question	Answer	Marks	Guidance
4*	<p>A discussion of the benefits and limitations of the use of email as a communication method to include:</p> <p><u>Indicative content</u></p> <p>Benefits</p> <ul style="list-style-type: none"> • Emails are delivered extremely fast when compared to traditional post. • Emails can be sent 24 hours a day, 365 days a year. • Webmail means emails can be sent and received from any device, anywhere in the world, that has an internet connection • Cheaper than using traditional post • Emails can be sent to one person or a group • An audit trail can be kept • Attachments can be sent • Any other valid suggestion <p>Limitations</p> <ul style="list-style-type: none"> • The recipient needs access to the Internet to receive email. • Viruses are easily spread via email attachments • Phishing • No guarantee the mail will be read until the user logs on and checks their email. • Possible incompatibility between system for opening attachments • Emails may go into junk/spam folder and be deleted without being seen • Is not always guaranteed to be delivered • Any other valid suggestion 	10	<p>Mark band 3 (7 – 10 marks) The learner has shown a detailed level of understanding by discussing the benefits and limitations of using email. The learner is able to provide a clear explanation of more than one benefit and limitation. Examples used to support discussion may be superficially related to scenario. Subject specific terminology and knowledge will be clearly used to support and inform the discussion. <i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p> <p>Mark band 2 (4 – 6 marks) The learner has shown a good level of understanding by describing at least one benefit and at least one limitation of using email. Descriptions may concentrate on either the benefit(s) or limitation(s) with limited depth. Some examples used to support discussion may not be relevant and may at times detract from fluency of narrative. Descriptions may concentrate on one method, with, at the lower end of the mark band, limited depth. <i>There is a line of reasoning presented with some structure. The information presented is in the most part relevant and supported by some evidence.</i></p> <p>Mark band 1 (1 – 3 marks) The learner has identified points relevant to the use of email and ideas will be poorly expressed. Subject specific terminology may be limited or missing. <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> <p>0 marks = Nothing worthy of credit.</p>

Question		Answer	Marks	Guidance
5	(a)	<p>Possible explanation of why the secure owners area would be included in the extranet type of www network technology includes:</p> <ul style="list-style-type: none"> • Restricted access/Private (1) requiring a user name and password/credentials (1) to be correctly input (1) • Any other valid suggestion 	3	<p>Up to three marks for a complete explanation.</p> <p>Read whole answer and mark to candidate's advantage.</p> <p>Accept answers relating to owners not being employed by PHHC so would not use the Intranet.</p> <p>The focus of the question is Why it is in the extranet and not a definition of an extranet</p>
5	(b)	<p>For one mark:</p> <ul style="list-style-type: none"> • Closed (1) 	1	<p>For one mark</p> <p>CAO</p>
6		<p>Identification and description of two physical protection methods that could be used to protect the main server to include:</p> <ul style="list-style-type: none"> • Biometrics (1st) finger print / eye scanners (1) confirm the identity of the user (1) • Locks (1st) only people with the key / number (1) can access the laptop / office (1) • CCTV / Cameras (1st) to have 24-hour surveillance (1) to deter burglars (1) • Bars on windows (1st) to deter burglars (1) • RFID (1st) authorised people will have a card / fob (1) to provide an audit trail (1) • Any other valid suggestion 	6	<p>For two physical protection methods:</p> <p>1st Mark – Identification of physical protect method.</p> <p>2nd / 3rd Marks – description of physical protection method</p> <p>Read whole answer and mark to candidate's advantage.</p> <p>DNA security guards</p> <p>Marks can be awarded for environmental protection measures such as putting a server above flood levels.</p>

Question			Answer	Marks	Guidance
7			<p>An explanation of why the star rating is classified as quantitative data to include:</p> <ul style="list-style-type: none"> • The rating is measured (1) on a scale (1) of 1 to 5 (1) • The rating is based on numbers/ not based on text (1) • Analysis (1) can be carried out on the star rating (1) • Numerical data (1) used to measure (1) quality of accommodation (1) • Any other valid suggestion 	3	<i>Up to three marks for explanation.</i>
Section B					
8	(a)		<p>For one mark:</p> <ul style="list-style-type: none"> • Academic (1) • Education (1) • Educational Institution (1) 	1	<i>For one mark</i>
8	(b)		<p>Possible responses include:</p> <ul style="list-style-type: none"> • A network (1) of <u>interconnected</u> networks / devices (1) spanning the world (1). • Uses the WWW (1) to browse websites (1) • Any other valid suggestion. 	3	<i>Up to three marks for explanation.</i>
9	(a)	(i)	<p>For one mark:</p> <ul style="list-style-type: none"> • Securing / security (1) 	1	<i>For one mark</i> CAO

Question			Answer	Marks	Guidance
9	(a)	(ii)	<p>The identification and description of the impact of the management step of securing on the university to include:</p> <ul style="list-style-type: none"> • Cost (1st) may increase (1) due to extra hardware / software / e.g. encryption software having to be purchased (1) • Compliance with legislation / Example (1st) if data is not kept secure (1) then fines could be given if information is breached (1) • Any other valid suggestion. 	3	<p><i>To be considered for marks for part (ii) marks must have been awarded in part (i)</i></p> <p><i>1st Mark – Identification of an impact.</i></p> <p><i>2nd / 3rd Marks – description of the identified impact.</i></p> <p><i>Read whole answer and mark to candidate's advantage.</i></p>
9	(b)		<p>An explanation of the confidential principle of information security to include:</p> <ul style="list-style-type: none"> • Information can <u>only</u> be accessed (1) by authorised people (1) • Is a legal requirement under GDPR / DPA (1) • Requires data to be kept safe (1) and take measures to ensure this (1) • Any other valid suggestion. 	3	<p><i>Up to three marks for explanation.</i></p>
9	(c)		<p>An explanation of the difference between the private and public information classification to include:</p> <p>Private is:</p> <ul style="list-style-type: none"> • <u>only</u> available to those who have been granted access rights (1) <p>Public is:</p> <ul style="list-style-type: none"> • available to anyone (1) 	2	<p><i>Up to two marks for a complete difference.</i></p> <p><i>MAX one mark if a difference is not provided in answer.</i></p>

Question		Answer	Marks	Guidance
10	(a)	<p>The identification and description of one characteristic of solid state media to include:</p> <ul style="list-style-type: none"> • Robust / durable (1st) there are no moving parts (1) so less likely to be damaged (if dropped / moved (1) • Mutability (1st) stored data / information (1) can be edited (1) • Storage capacity (1st) can be high (1) at a lower cost (1) • Low power consumption (1st) as no moving parts (1) better for the environment (1) • Fast transfer of data (1st) is faster than HDD (1) increase in efficiency/saves time (1) • Any other valid suggestion. 	3	<p>1st Mark – Identification of a characteristic of solid state media.</p> <p>2nd / 3rd Marks – Description of the identified characteristic.</p> <p>Read whole answer and mark to candidate's advantage.</p> <p>DNA portable</p>
10	(b)	<p>A description of one advantage to a student of using solid state media to store the downloaded course to include:</p> <ul style="list-style-type: none"> • Course can be accessed (1) if no internet connection is available (1) • Course can be completed (1) at any place/device is portable (1) • Sections / topics can be revisited (1) if no internet connection available (1) • Lower cost of electricity (1) as it requires less to power than hdd (1) • Large storage capacity (1) can store lots of downloaded courses/topics (1) • Any other valid suggestion. 	2	<p>Up to two marks for a complete description of an advantage.</p> <p>The focus of the question is an advantage to the student.</p>

Question		Answer	Marks	Guidance
10	(c)	<p>For one mark:</p> <ul style="list-style-type: none"> • Audio (1st) <p>Possible justification of information style to include:</p> <ul style="list-style-type: none"> • People need to hear (1) what the presenter (1) is saying (1) • Visuals / graphs / images (1) can be converted to audio (1) to describe them (1) • Any other valid suggestion. 	4	<p>1st Mark – Identification of correct information style.</p> <p>2nd / 3rd / 4th Marks – Justification of choice of information style.</p> <p>Read whole answer and mark to candidate's advantage.</p>
10	(d)	<p>An identification and description of the information style that should be used for the certificate of completion for students with a visual impairment to include:</p> <p>For one mark:</p> <ul style="list-style-type: none"> • Braille (Text) (1st) <p>Possible description of information style to include:</p> <ul style="list-style-type: none"> • Is used for documents (1). • generated through the use of a braille printer (1) • Is a series of dots (1) that use a set pattern for each letter (1) • Can be read by touch (1) • Any other valid suggestion. 	3	<p>1st Mark – Identification of correct information style.</p> <p>2nd / 3rd Marks – Description of choice of information style.</p> <p>Read whole answer and mark to candidate's advantage.</p>

Question	Answer	Marks	Guidance
11*	<p>A discussion of how the Computer Misuse Act has been broken to include:</p> <p><u>Indicative content</u></p> <p>The CMA makes it illegal to:</p> <ul style="list-style-type: none"> • Gain unauthorised access to computer material • Gain unauthorised access with the intent to commit further offences • Make unauthorised modification of data / information • Making, supplying or obtaining anything which can be used in computer misuse offences <p>Examples include:</p> <ul style="list-style-type: none"> • The breach means that access has been gained to the hardware / software • Changes to data / information may have been made • Data / information may have been stolen • Identity theft may occur if personal details have been stolen • Details may have been changed to the benefit of the students • Any other valid suggestion 	10	<p>Mark band 3 (7 – 10 marks) The learner has shown a detailed level of understanding by discussing how the CMA has been broken. The learner is able to provide a clear explanation of more than one principle of the CMA. Examples used to support discussion may be superficially related to scenario. (online learning / University) Subject specific terminology and knowledge will be clearly used to support and inform the discussion. <i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p> <p>Mark band 2 (4 – 6 marks) The learner has shown a good level of understanding by describing at least one principle of the CMA. Some examples used to support discussion may not be relevant and may at times detract from fluency of narrative. Descriptions may concentrate on one principle, with, at the lower end of the mark band, limited depth. <i>There is a line of reasoning presented with some structure. The information presented is in the most part relevant and supported by some evidence.</i></p> <p>Mark band 1 (1 – 3 marks) The learner has identified points relevant to the use of the CMA and ideas will be poorly expressed. Subject specific terminology may be limited or missing. <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> <p>0 marks = Nothing worthy of credit.</p>

Question		Answer	Marks	Guidance
12	(a)	<p>An explanation of how charts and graphs can be used by the university when analysing the courses that have been taken by students to include:</p> <ul style="list-style-type: none"> • Can show data / information (1) in a visual way (1). • Trends and patterns (1) can be seen to interpret data (1). • To show number of students (1) on each course each year (1). • To show most / least popular courses (1) to make informed decisions (1). • Any other valid suggestion. 	3	<i>Up to three marks for explanation.</i>
12	(b)	<p>The purpose of an MIS to include:</p> <ul style="list-style-type: none"> • Provides an organisation / the university with the tools to organise / manage / evaluate/ analyse (1) (to present) data/information (1) • Any other valid suggestion. 	2	<i>Up to two marks for a complete answer covering the purpose of an MIS.</i>

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