



Mark Scheme (Results)

August 2013

NQF BTEC Level 1/Level 2 Firsts in
Information and Creative Technology

Unit 1: The Online World
(20560E_01)

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications come from Pearson, the world's leading learning company. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk for our BTEC qualifications.

Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

If you have any subject specific questions about this specification that require the help of a subject specialist, you can speak directly to the subject team at Pearson. Their contact details can be found on this link: www.edexcel.com/teachingservices.

You can also use our online Ask the Expert service at www.edexcel.com/ask. You will need an Edexcel username and password to access this service.

Pearson: helping people progress, everywhere

Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

Summer 2013

Publications Code xxxxxxxx*

All the material in this publication is copyright

© Pearson Education Ltd 2013

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.

Question Number	Answer	Mark
1	Commerce	1

Question Number	Answer	Mark
2	<ahref=>: Hyperlink : Line Break	2

Question Number	Answer	Mark
3 (a)	Speaking/Talking/Video over the internet	1

Question Number	Answer	Mark
3 (b)	<p>Award one mark for any of the following (with reference to technology):</p> <ul style="list-style-type: none"> • utilising an infrastructure that already exists (1) • use of smart phones/Ipad/tablets (1) • can be used anywhere that has an internet connection (1) • can use with wireless connectivity/roaming internet (1). <p>Do not award mark for 'internet connection' on its own. Reject any reference to cost.</p>	1

Question Number	Answer	Mark
4 (a)	Wireless	1

Question Number	Answer	Mark
4 (b)	P13fD5h#	1

Question Number	Answer	Mark
5 (a)	https:// (in the address bar)	1

Question Number	Answer	Mark
5 (b)	Encrypting	1

Question Number	Answer	Mark
6	To achieve faster file downloads To reduce storage space required	2

Question Number	Answer	Mark
7 (a)	<p>Award one mark for any of the following up to a maximum of two marks:</p> <ul style="list-style-type: none"> • include attachments/images (1) • faster/more convenient than post (1) • send same email to more than one recipient (CC) (1) • forwarding (1) • blind copies (BCC) (1) • set up groups (1) • address books (1). <p>Accept any other relevant phrasing/wording.</p> <p>Do not accept faster/quicker without comparison.</p>	2

Question Number	Answer	Mark
7 (b)	<p>Award one mark for any of the following up to a maximum of two marks:</p> <ul style="list-style-type: none"> • Phishing emails maybe received (asking for confidential information) (1) • Viruses are spread via email (attachments/links) (1) • Viruses can be passed on to whole address books (1) • Viruses are time consuming to remove (1) • Updating virus software can be expensive (1) • Employees can spend time on personal emails (1). • Lack of security (as emails may be intercepted) (1) • Delivery may be delayed by email/spam filter <p>Accept any other relevant phrasing/wording.</p>	2

Question Number	Answer	Mark
8	Packet Switching	1

Question Number	Answer	Mark
9	<p>Award one mark for correct identification and one additional mark for appropriate expansion.</p> <p>Both can view changes in real time (1) so that Jim and Laura can discuss documents using associated online services and make changes (1).</p> <p>Remove compatibility issues (1) so that Jim and Laura can use any operating system to use the software/there are no minimum system requirements for the software (1).</p> <p>One document for ease of version control (1) which means that Jim and Laura are aware of the latest version being used/will not present an out of date version (1).</p> <p>Automatic backup (1) takes away responsibility from either Jim or Laura owning the backup process/either Jim or Laura can access the backup at any time (1).</p> <p>More creativity (1) as both parties may have different thoughts on how to prepare the presentation and help each other with ideas (1).</p> <p>Better decision making on the final product (1) as Jim and Laura can talk to each other and agree between themselves (1).</p> <p>Accept any relevant wording/phrasing.</p>	2

Question Number	Answer	Mark
10	<p>External Hard Disk</p> <p>Cloud Storage</p>	2

Question Number	Answer	Mark
11	<p>POP (Middle of diagram Left)</p> <p>NAP (Middle of diagram Right)</p>	2

Question Number	Answer	Mark
12	<p>Award one mark for correct identification and one additional mark for appropriate expansion up to a maximum of four marks.</p> <p>Allows individual stock items to be traced, located and retrieved without human intervention (1) using an RFID chip system that can monitor the stock (1).</p> <p>Automatically identifies stock levels/when reordering is required (1) so that user time is reduced for manual ordering (1).</p> <p>It provides a more accurate system and eliminates human error (1) which means that the company will benefit from fewer errors in ordering costs etc (1).</p> <p>Robotics can facilitate automated retrieval (1) as they can be programmed which means humans are not needed and costs can be saved/robots can keep going (1).</p> <p>Accept any other relevant phrasing/wording.</p> <p>Award marks for any other relevant example.</p> <p>Do not accept cheaper or quicker without justification.</p>	4

Question Number	Answer	Mark
13 (a)	Web crawler	1

Question Number	Answer	Mark
13 (b)	" " (speech marks)	1

Question Number	Answer	Mark
14	<p>Award one mark for correct identification and one additional mark for appropriate expansion up to a maximum of four marks.</p> <p>Improved security/safety/privacy (1) as encrypted files can be downloaded (1).</p> <p>It saves time/quicker/faster (1) because a single connection can be used for multiple downloads (1).</p> <p>Accept any other relevant phrasing/wording</p>	4

Question Number	Answer	Mark
15 (a)	<p>Award one mark for correct identification and one additional mark for appropriate expansion.</p> <p>More local processing power is available (1) because functions are being carried out by a remote server (1).</p> <p>Reduces demand on hard disk space (1) because data can be stored on a remote server (1).</p> <p>More reliable back-up completed (1) because automatic backups can be scheduled (1).</p> <p>Accept any other relevant phrasing/wording.</p>	2

Question Number	Answer	Mark
15 (b)	<p>Award one mark for correct identification and one additional mark for appropriate expansion.</p> <p>Software as a service model:</p> <ul style="list-style-type: none"> • software is centrally hosted (1) which can reduce software support/maintenance (1) • software is updated regularly/ up to date (1) which means that businesses maintain their competitive edge (1) • more flexibility in access (1) users only need to pay for software when it is needed (1). <p>Accept any other relevant phrasing/wording.</p>	2

Question Number	Answer	Mark
16 (a)	<p>Award one mark for correct identification and one additional mark for appropriate expansion.</p> <p>The server searches using the keyword (1) which is matched against the index/ list of websites/ search engine databases (1)</p> <p>Accept any other relevant phrasing/wording</p>	2

Question Number	Answer	Mark
16 (b)	<p>Award one mark for correct identification and one additional mark for appropriate expansion.</p> <p>To complete the same search as a client-side process would require the browser to download the entire search engine program and index (1) which places extra demand on the client's computer/browser (1)</p> <p>Accept any other relevant phrasing/wording</p>	2

Question Number	Answer	Mark
17	<p>Award one mark for correct identification and one additional mark for appropriate expansion.</p> <p>Data is normalised/ split/ organised/ stored into separate tables (1) which avoids duplication (1).</p> <p>Links between tables with primary/foreign key (1) allows for more complex searches/querying the database is more effective (1).</p> <p>Online retailers would have a large number of items for sale so a single table would be far too large to deal with the content without separating it into a number of smaller tables (1) so that for any areas where the data has to be keyed in more than once this would be done with less chance of data duplication (1).</p> <p>Having smaller tables for different departments such as books, CDs, DVDs etc means that the data stored would be more organised and more easily searched/queried (1) as they would be related to one of the smaller tables (such as books) rather than the single large table that would contains all the retailer's data (1).</p> <p>Accept any other relevant phrasing/wording.</p>	2

Question Number	Indicative content	Mark
18	<p>Managers can see where the vehicles are and can track where they have been to ensure the drivers have kept to a schedule for timing etc (not going off on personal business).</p> <p>Emergency services can track the whereabouts of the vehicles in case of any problems.</p> <p>See where assets are deployed so that any money saving issues can be raised. Can add on deliveries to other drivers in the same area.</p> <p>Track scheduling/ whereabouts and progress to ensure that drivers are doing what they are supposed to be doing in the correct place.</p> <p>Time and motion so the data can be used to work out other schedules pay etc.</p> <p>Stolen vehicle recovery so if the van/car is stolen the company/police can find the vehicle which saves time using extra rented vehicles to cover the missing time.</p> <p>Vehicle misuse by drivers who may want to use the van for personal reasons such as collection or delivery of personal items.</p> <p>Invasion of privacy/lack of trust – some staff may think they are being spied on and not being trusted by managers which can cause animosity between colleagues.</p> <p>Costs can be very expensive to get all the vehicles tracked where the money could be used for more useful purposes such as schools.</p> <p>Who will monitor data? – a member of staff could be needed at an extra cost to the company or someone already employed could be asked to do more work to cover it (again at extra cost). Staff may need to be trained to use software.</p> <p>Who can access data logs? – can it be used on a personal level by the company or can be police use it for criminal investigations?</p> <p>Safety for lone workers as they are out on their own in areas that may not be considered safe so they are monitored if there are any problems.</p> <p>Accept any other valid response.</p>	8

Level	Descriptor
0 0 marks	No rewardable material.
1 1-3 marks	A few key points identified, or one point described in some detail. The answer is likely to be in the form of a list. Only one viewpoint considered. Points made will be superficial/generic and not applied/directly linked to the situation in the question.
2 4-6 marks	Some points identified, or a few key points described. Consideration of more than one viewpoint but there will be more emphasis on one of them. The answer is unbalanced. Most points made will be relevant to the situation in the question, but the link will not always be clear.
3 7-8 marks	Range of points described, or a few key points explained in depth. All sides of the case are considered and the answer is well-balanced, giving weight to all viewpoints. The majority of points made will be relevant and there will be a clear link to the situation in the question.

Further copies of this publication are available from
Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467

Fax 01623 450481

Email publication.orders@edexcel.com

Order Code xxxxxxxx Summer 2013

For more information on Edexcel qualifications, please visit our website
www.edexcel.com

Pearson Education Limited. Registered company number 872828
with its registered office at Edinburgh Gate, Harlow, Essex CM20 2JE

Ofqual
■■■■■■■■■■



Llywodraeth Cynulliad Cymru
Welsh Assembly Government

