

Examiners' Report June 2013

GCSE ICT 5IT03 01

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Introduction

This unit was first examined in January 2012 and forms part of the double award GCSE ICT qualification.

As with the Unit 1 examination this paper follows a non tiered structure which allows all candidates to access all grades. To this end, the paper is designed to gradually increase in difficulty with a greater percentage of higher grade components in the later questions.

Also, the paper is written within a context to allow candidates to demonstrate their ability to apply their knowledge rather than produce rote answers. The context runs throughout the paper and candidates should make use of this, and the range of visual stimuli provided, to guide them throughout the paper.

On the whole the candidates' performance showed a slight improvement compared with performance in the January 2013 assessment window but was not as strong as those candidates sitting the exam in June 2012. It was clear that good use is being made of past examination materials in preparing candidates, as a number of key areas have shown improvement, for instance a greater number of candidates were able to identify the 'creative commons' licence and its use.

However, there were a number of common misconceptions and key areas of weaker performance evident. These have been identified in detail for each of the individual questions within this report. As with previous series it was clear that, in future, a wider scope of the specification content should be covered and not just those areas that have appeared in previous papers. It was clear that many candidates were prepared with rote answers and not showing deeper understanding of a number of elements of the specification that would allow them to apply their knowledge more accurately within the given context.

This is a 'digital design' paper and as such addresses a range of practical, applicable skills. Candidate preparation should be as realistic as possible, creating links with Unit 2 and 4 and highlighting the methods of gathering, preparing, designing and creating digital content within a variety of contexts, which will greatly improve candidate performance.

Question 1 (a) (i)

Candidate performance in this question was generally quite good with the majority of candidates gaining at least 2 of the 3 marks available. However there was a higher than expected number of candidates who did not achieve any marks. Often this was due to responses that were not specific enough to show a suitable understanding or candidates did not address the given question, suggesting improvements to the given example rather than ways to adapt the design to make it more suitable for a different audience.

As with previous papers it should be noted that responses such as 'Add colour' are not sufficiently detailed enough to gain credit; reference to colour should be specific for the given scenario/context. For example candidates could refer to the use of 'bright' colours to make it more appealing to younger audiences.

Here the candidate shows a good understanding of how to adapt a product for a different audience. The response identifies that use of simpler language and images would aid understanding/access for a young user.

1 (a) (i) **Figure 1** shows a screen from a music streaming application (App). The App has been designed for adults.

Jenny wants Mohinder to create a version of the App for children.

Give **three** ways that the App could be changed to make it more suitable for children.

(3)

1. Could be changed so that there are images included in the app.

2. Use simpler language

3. Rollover ~~be~~ images on buttons.



ResultsPlus Examiner Comments

3 marks awarded.

1 for point 4 in the mark scheme. Mark for 'more graphics'

1 for point 6

1 for point 1 (images on buttons).



ResultsPlus Examiner Tip

Ensure that responses are always fully suited to the context. In this case, images on buttons would be appropriate to aid young users but 'rollovers' is not something that you would expect to find on a mobile device.

Question 1 (a) (ii)

The responses in this question showed a significant improvement in the quality of candidates' hand drawn designs, compared to previous series, with the majority of candidates gaining at least 3 of the 4 marks available and a very large number of candidates gaining all 4. Where candidates did not gain all 4 marks this was usually due to poor relative sizing of design elements. To improve designs, candidates should ensure that if they are not going to use the complete response box area to create their design, they should indicate the boundaries/edges of their screen design in order to give a clearer understanding of the relative placement and size of the components.

Here the candidate only gains 3 marks.

(ii) The App will also stream music videos.

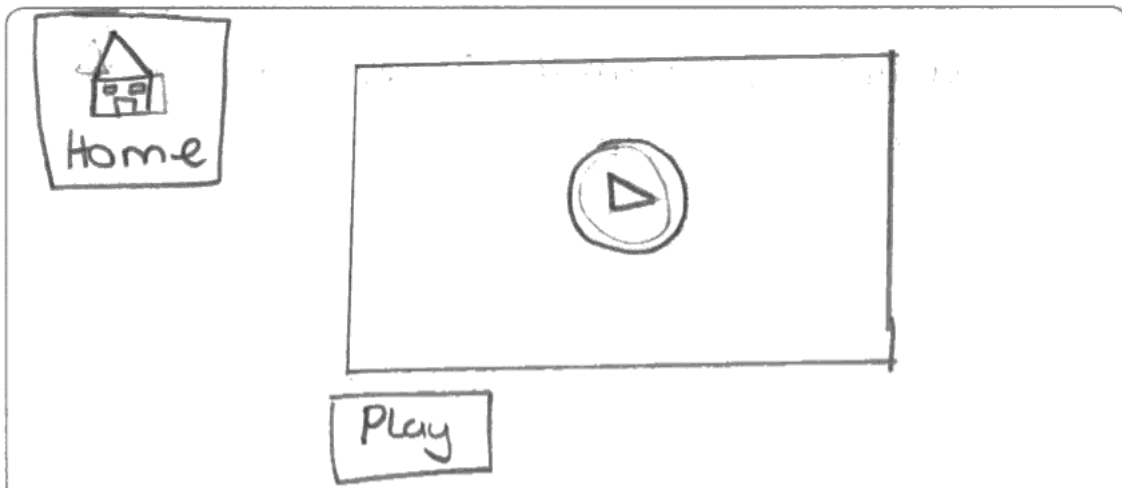
These are the user requirements for the screen:

- video window
- play button
- home button.

Use this space to sketch a rough design of the screen. It must meet the user requirements.

Label your sketch.

(4)



ResultsPlus Examiner Comments

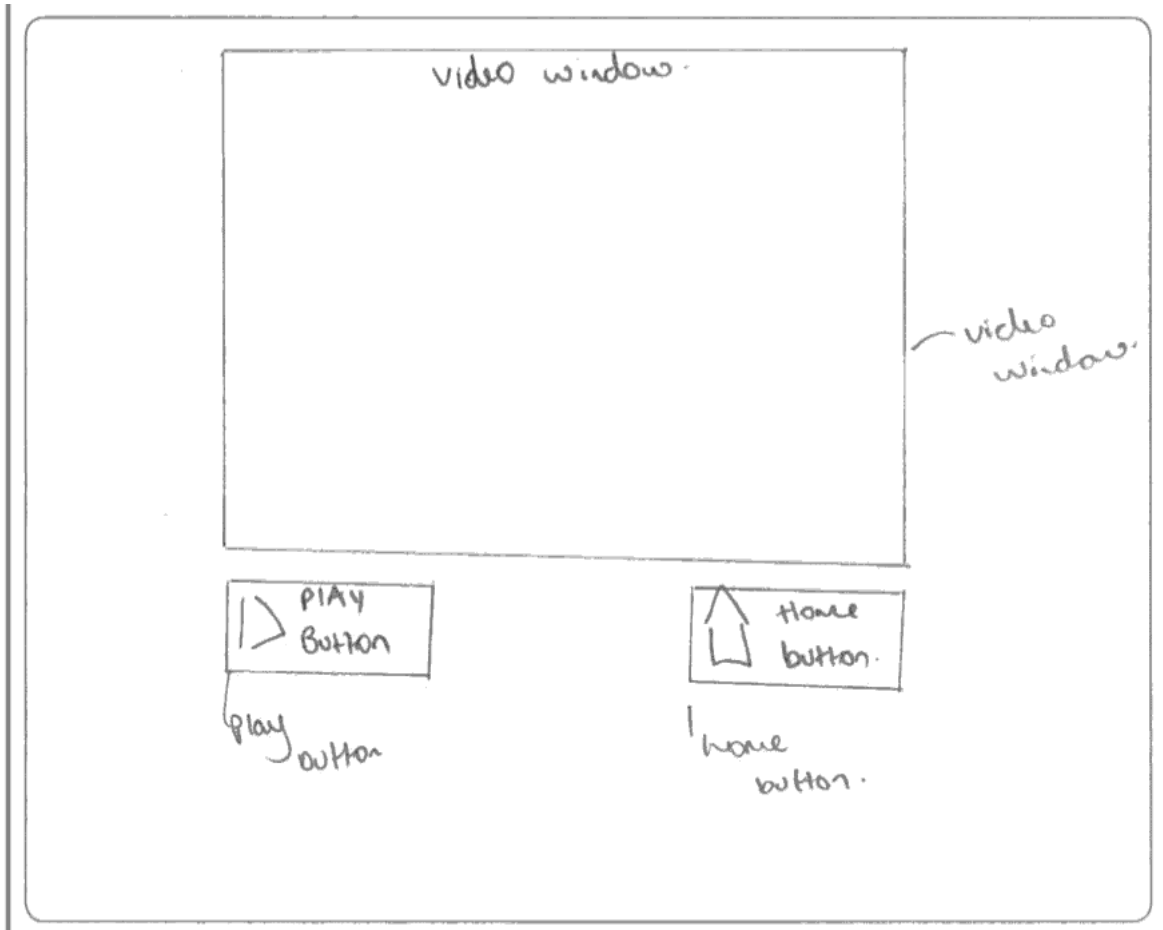
One for each correct component included, but does not gain the mark for sizing elements. As no outer screen edge is given in the diagram, it is assumed that the whole response area is the implied screen area meaning that the size of components is not sensible as too much white space is left.



ResultsPlus Examiner Tip

Ensure designs components are sensibly sized in relation to the 'screen'.

This example is just enough for all 4 marks.



ResultsPlus
Examiner Comments

There is some additional white space at the side and at the bottom but the alignment and relative sizing of the components is enough to gain the mark.

Question 1 (a) (iii)

Performance on this question was quite pleasing with the majority of candidates gaining at least 1 of the 2 marks available with a significant number gaining both. Generally candidate responses were quite accurate and showed a good understanding of drop down menus. Where candidate performance was not as good, this was usually due to not accurately applying the general understanding to the specific context, that is the use of drop downs on a mobile device.

1 mark awarded for this response.

(iii) Figure 2 shows the settings screen of the music App.

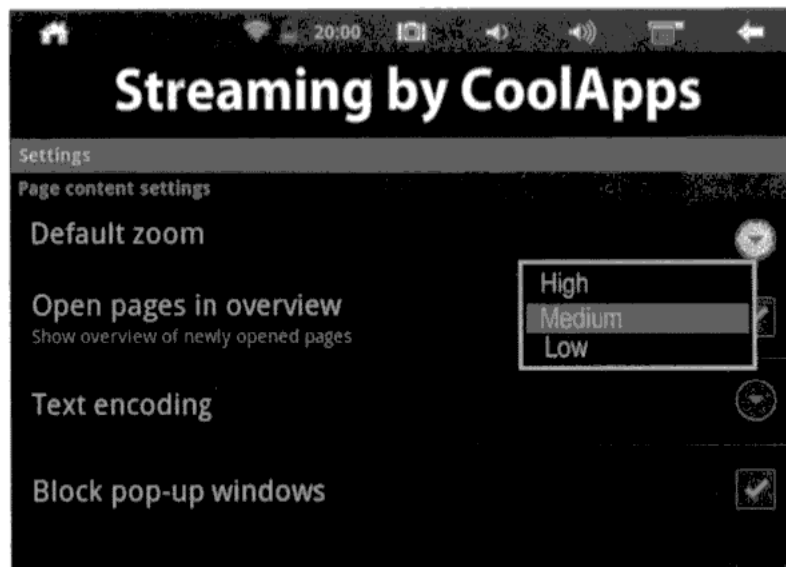


Figure 2

Give **two** reasons why mobile Apps use drop down menus.

(2)

- 1 Reduces the difficulty of actually typing in the option.
- 2 Refines the option, so there is only a minimum to choose from.



ResultsPlus
Examiner Comments

Not enough for point 4 of mark scheme as the 'difficulty' of typing does not change. 1 for point 3.

1 To save space on the page

2 To decrease the effect of errors because of open-ended answers.



ResultsPlus
Examiner Comments

2 marks awarded

1 for point 1 of the mark scheme

1 for point 5. Decreased error because of lack of 'open ended answers'.

Question 1 (a) (iv)

Candidate performance on this question was not as strong as might have been anticipated for a question of this nature with just over half of candidates gaining 2 or more marks out of 3. Where candidates did not perform well was often due to not applying knowledge to the given question. Many candidates produced general, 'stock' answers relating to the advantages of using templates rather than, in this case, stating the ways in which they ensure consistency.

Although the explanations within this example could be improved, enough understanding is demonstrated to gain all 3 marks.

(iv) Mohinder uses a template file to make sure all screens in the App are consistent.

Give **three** ways that a template file helps to make screens consistent.

(3)

- 1 because a similar lay out is used for all ~~ses~~ screens
- 2 some colours are used
- 3 same font / ~~for~~ size of text is used



ResultsPlus Examiner Comments

The candidate provides three suitable answers achieving all 3 marks available.

1 for consistency of layout 1 for just enough for consistent colour schemes and 1 for consistency of font.

(iv) Mohinder uses a template file to make sure all screens in the App are consistent.

Give **three** ways that a template file helps to make screens consistent.

(3)

- 1 keeps logo in same place
- 2 keeps title in the same place
- 3 keeps button in the same place



ResultsPlus Examiner Comments

These three responses are all related to consistency of layout so only 1 mark is awarded.



ResultsPlus Examiner Tip

When providing answers try to address a range of different factors.

Question 1 (b)

Performance on this question was generally quite good with the majority of candidates gaining at least 1 mark and most of those gaining both. Generally candidates showed a good understanding of the characteristics of vector graphics, but were not always able to apply this knowledge to the given context ie their use on a mobile device.

Here the candidate provides a suitable answer to gain 2 marks.

(b) CoolApps' products are designed for tablets and smartphones.

The images used when making Apps are often vector graphics.

(i) Identify **one** characteristic of a vector graphic.

(1)

when enlarged, vector graphics do not lose resolution and does not become blurry as they are made up of lines and curves.

(ii) State why the characteristic you identified makes vector graphics appropriate for use on tablets and smartphones.

(1)

So when people look at the graphic on smartphones it will be smaller but will still look the same compared to the bigger picture on the tablet. Vector graphics do not lose res.

(Total for Question 1 = 14 marks)



ResultsPlus

Examiner Comments

1 awarded for retaining resolution when enlarged.

1 awarded for identifying the need to resize on different devices.

Here the candidate gains 1 mark for part (i)

(b) CoolApps' products are designed for tablets and smartphones.

The images used when making Apps are often vector graphics.

(i) Identify **one** characteristic of a vector graphic.

(1)

Small file size

(ii) State why the characteristic you identified makes vector graphics appropriate for use on tablets and smartphones.

(1)

Do not take long to load



ResultsPlus

Examiner Comments

1 mark awarded for small file size.

1 mark not awarded for second point as this does not show enough contextual understanding shown, ie why would a small file size/fast loading times be of particular benefit for a mobile device?

Question 2 (a) (i)

Performance on this question was significantly below that which would be anticipated with the majority of candidates not gaining any marks. On the whole, responses showed a lack of deep understanding of moodboards and few candidates were able to give two accurate advantages of their use. Candidates should be fully versed in all aspects of digital design and be able to apply their knowledge to a range of contexts. To support this, candidates should explore the full range of design documentation, their use, content and benefits.

Here the candidate does not gain credit for their responses.

2 CoolApps is making an e-book for young children.

Before Mohinder starts work on the e-book Jenny makes a moodboard.

(a) (i) Moodboards help designers and clients share ideas during the early development stages of a product.

Give **two** other benefits of using a moodboard when designing and creating a product.

(2)

1. It shows what the product should look like when its finished
2. It shows what should be done to make the product.



ResultsPlus
Examiner Comments

Response 1 is an example of a particularly common error. Moodboards do not show 'what the product will look like' they give an idea of the 'feel' of a product.

Here the candidate provides two correct answers.

1. To get inspiration for the overall look and feel of the product - eg. ~~but~~ colour schemes
2. To see what ~~font~~ typography and art styles work well together.



ResultsPlus
Examiner Comments

1 mark for 'feel of the product'.

1 mark for 'what styles work well together'.

Question 2 (a) (ii)

Candidate performance on this question varied quite significantly with a reasonable number of candidates gaining 1 or 2 marks of the available 3, but still a surprisingly large number did not gain any marks. Many responses showed that candidates often have large gaps in their understanding of the whole design and development cycle. Performance in other parts of the paper show that candidates often know what different documents do and the different processes that are carried out during design and development, but performance in this question suggests that these are often taught out of context. Here, when preparing candidates, links with practical projects would help. candidates should be given opportunities to explore the range of tasks that would be carried out in a real life project.

Here the candidate gains 2 marks of a possible 3.

(ii) This is part of a timeline of the tasks Mohinder must complete after he collects the moodboard.

January	February	March	April		May	
Collect moodboard from Jenny				Produce storyboard	Collect assets	Produce assets

Identify **three** tasks Mohinder could complete between collecting the moodboard and producing the storyboard.

(3)

1 Market research to see what is already existing.

2 information gathered from target user group to see what they want.

3 Design ideas to get a familiarity of what the product may look like.



ResultsPlus Examiner Comments

1 - Marking point 3; Market research on its own would not be enough, but with 'what is already existing' it gains the mark

2 - Marking point 2 - 'interview target audience'

3 - does not gain a mark

This response gains 3 marks.

(ii) This is part of a timeline of the tasks Mohinder must complete after he collects the moodboard.

January	February	March	April		May	
Collect moodboard from Jenny	Product proposal		Site map	Produce storyboard	Collect assets	Produce assets

Identify **three** tasks Mohinder could complete between collecting the moodboard and producing the storyboard.

(3)

1. Making a site map
2. Product proposal
3. Background check of target audience



ResultsPlus
Examiner Comments

- 1 - Marking point 1
- 2 - Marking point 4
- 3 - Marking point 2 - just enough for 'doing audience profile'.

Question 2 (a) (iii)



The majority of candidates were able to gain at least 1 of the 2 marks available on this question. Where candidates did not perform as well, this was often due to responses that did not make it fully clear which aspect they were referring to or responses that suggested ways to change the button rather than the design documentation.

Question 2 (b) (i)

Candidates performed reasonably well on this question, typically gaining 2 or 3 marks.

Here the candidate provides a comprehensive answer identifying the names of the permissions/licences and the way that this would affect their use.

(b) (i) Mohinder has started to collect assets for the e-book.
He finds two images on the internet he wants to use.

Image 1	Image 2
	

For each image name the permissions/licences that apply and state how these affect the use of the image. (4)

Image 1
Permission/licence
Creative Commons
How this affects the use of the image
Depending on which license, Mohinder may be able to adapt it as he wishes. Similarly, he may not even be able to use it at all, if he wishes it to be commercial.

Image 2
Permission/licence
Copyright
How this affects the use of the image
Mohinder cannot edit the image in any way and must obtain permission to use it.



ResultsPlus
Examiner Comments

All 4 marks awarded.

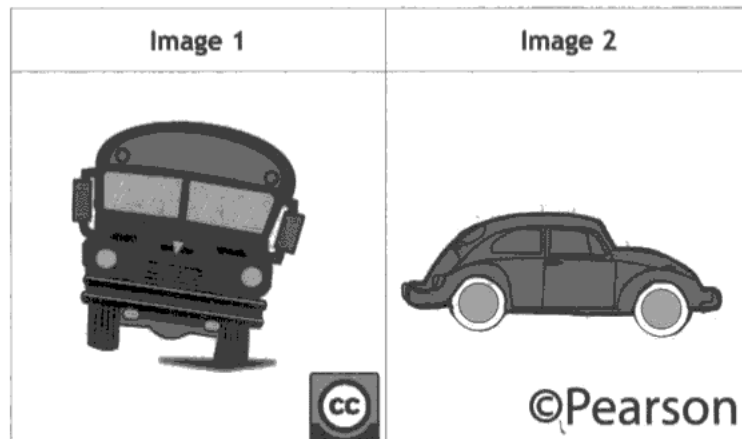
Image 1 Licence name - correct. Use - Correct.

Image 2 Licence name - correct. Use - Correct.

Here the candidate gains 2 marks for identifying the licences but does not gain credit for their use.

(b) (i) Mohinder has started to collect assets for the e-book.

He finds two images on the internet he wants to use.



For each image name the permissions/licences that apply and state how these affect the use of the image.

(4)

Image 1

Permission/licence

creative commons licence

How this affects the use of the image

you need to ask permission from the owner of the image before using it

Image 2

Permission/licence

copyright

How this affects the use of the image

you need to give credit to the owner of the image



ResultsPlus
Examiner Comments

2 marks awarded.

Image 1 Licence name - correct. Use - Incorrect.

Image 2 Licence name - correct. Use - Incorrect.

Question 2 (b) (ii)

Many candidates did not perform well on this question with a very large number not gaining any marks. While just over half of candidates did gain at least 1 mark, usually for identifying the range of images that would be available, very few gained both marks. Generally candidate responses showed a lack of understanding of the application of copyright/permissions in a practical situation. Candidates need to understand how permissions are applied/granted in real life situations.

This example shows typical misconceptions seen in candidate responses.

(ii) Mohinder uses a photo sharing site on the internet to gather more images for the e-book.

Give **two** benefits to **Mohinder** of doing this.

(2)

1. because there are no laws involved in using the pictures
2. pictures have been uploaded for public use



ResultsPlus

Examiner Comments

No marks gained.

1. Even if shared under creative commons there would still be laws that govern the use of the image.
2. Not enough understanding shown to credit for 'permission would be stated on site'.

Question 3 (a)

Candidates performed well here with most candidates gaining all 4 marks by producing sketched designs of two data entry boxes each with a feature to improve data entry accuracy. Where candidates did not achieve full marks this was usually due to the data entry method on the date of birth field not being accurate enough.

Here the candidate provides a response suitable for 4 marks.

3 Users can download *CoolApps*' products from the company's website.

(a) To download a product the user must register with the site.

Figure 4 shows the registration page.

Some data entry fields are missing from the page.

Users will also need to enter:

- Date of birth
- Phone type (Android, Windows, Apple, Blackberry).

The screenshot shows a web browser window titled "Registration" with a URL bar containing "we Registration". The page header includes "Home Bookmarks Settings". The main heading is "CoolApps - Registration". Below the heading are four buttons: "Home", "Downloads", "Register", and "Login". The text below the buttons reads: "To access our products please complete this form. Mandatory fields are marked *." The form contains the following fields:

- First Name:
- Last Name:
- *Email:
- *Username: (with the note "this will be used at login" below it)
- *Password:
- *Confirm Password:

Handwritten annotations in black ink are present:

- "D.O.B" and "Date of Birth" written above a date entry field consisting of six boxes: / /
- "Phone type" written to the left of a dropdown menu. The dropdown menu is open, showing the following options: "Blackberry" (selected with a checkmark), "Android", "Windows", and "Apple".

A "Submit" button is located at the bottom right of the form area.

Figure 4

Add data entry fields to the registration page that would allow users to enter the required data accurately.

(4)



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Examiner Comments

4 Marks Awarded.

DOB Entry field - Awarded. Data entry feature - Awarded.

Phone type Entry field - Awarded. Data entry feature - Awarded.

Here the candidate is awarded 2 of the 4 marks available.

3 Users can download *CoolApps'* products from the company's website.

(a) To download a product the user must register with the site.

Figure 4 shows the registration page.

Some data entry fields are missing from the page.

Users will also need to enter:

- Date of birth
- Phone type (Android, Windows, Apple, Blackberry).

Registration Home Bookmarks Settings

CoolApps - Registration

Home Downloads Register Login

To access our products please complete this form. Mandatory fields are marked *.

First Name: Last Name:

*Email:

*Username:
this will be used at login

*Password: *Confirm Password:

Phone type
~~Phone~~
(Android, Windows, Apple, Black berry)

~~Gender~~
Date of Birth

Submit

Figure 4

Add data entry fields to the registration page that would allow users to enter the required data accurately.

(4)



ResultsPlus
Examiner Comments

2 Marks Awarded.

DOB Entry field - Awarded. Data entry feature - not awarded.

Phone type Entry field - Awarded. Data entry feature - not awarded (not enough to imply that a validation rule has been included).

Question 3 (b)

The majority of candidates achieved 1 or 2 marks on this question with very few achieving all 3. Typically responses correctly identified the need to ensure that the page did not scroll horizontally either through repositioning of the title or the top navigation bar. Where candidates did not gain marks, responses tended to repeat similar points or provide suggestions that were too vague ie 'add colour'.

Here the candidate gains 1 mark. This response is typical of many candidate responses where they suggest a number of factors that all would have the same effect ie to reduce the horizontal scrolling.

(b) Figure 5 shows a download page from the CoolApps website.

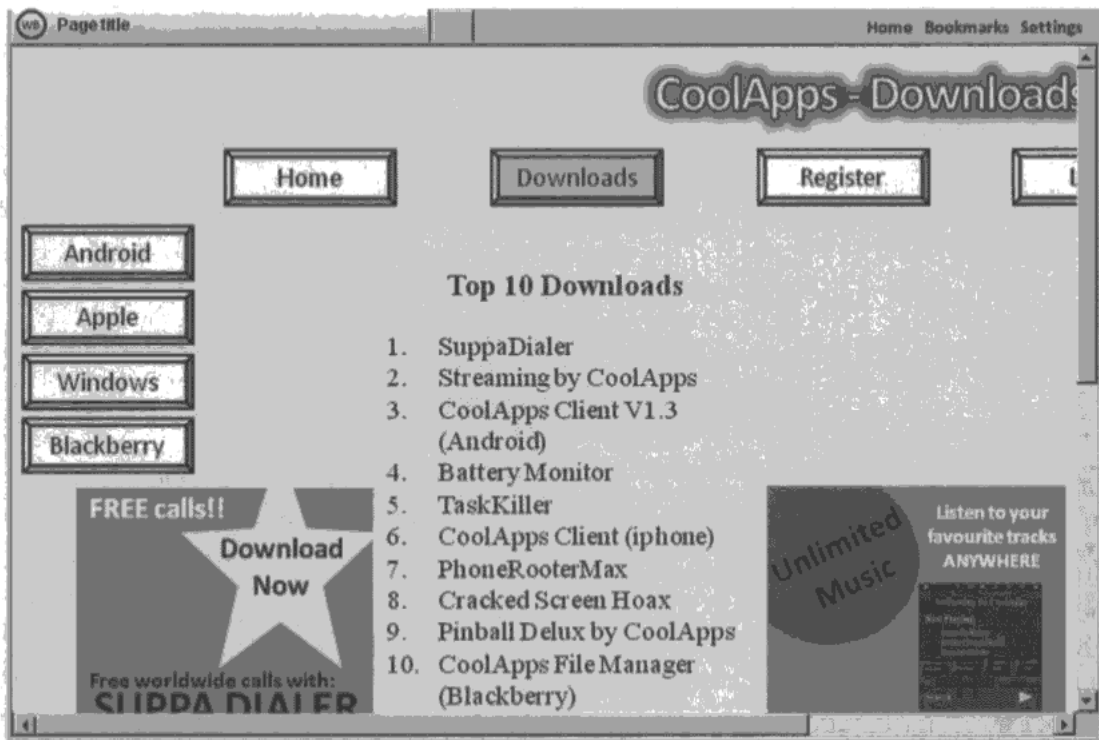


Figure 5

Give **three** ways that the design of the page could be improved.

(3)

1. The excess scroll should be removed
2. The title should be centred in the middle
3. The ~~nav~~ top navigation bar should be centred (it is cut off)



ResultsPlus
Examiner Comments

- 1 for point 2 - reduce scrolling.
- 0 - repeated point (would reduce scrolling).
- 0 - repeated point (would reduce scrolling).

Question 3 (c) (i)

Candidates performed well on this task producing accurate structure diagrams that included the indicated website pages and a large majority of candidates gained all 4 available marks. Where candidates did not score full marks was typically because the 'contact us' page was omitted.

Question 3 (c) (ii)

The majority of candidates achieved 1 of the available 2 marks on this question. Most commonly, responses gained credit for identifying that the structure diagram shows which pages link to/from which other pages. Only a very small number of candidates gained the second available mark by identifying that the structure diagram also shows an overview of the general content/purpose of each page.

(ii) Explain why Mohinder creates a structure diagram when designing a website.

(2)

Mohinder created a structure diagram to present the layout of how his website will look. He done this, so he can identify the links from each of the pages, and to remove any pages if needed.



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Examiner Comments

Here the candidate provides a response that gains 1 mark for identifying that the diagram shows the links between pages.

Here the candidate is awarded 2 marks.

(ii) Explain why Mohinder creates a structure diagram when designing a website.

(2)

So that he can have a clear understanding of what the content of the website will be and how each page will be linked together.



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Examiner Comments

1 mark for 'content of the webpage' - just enough for overview of pages etc.

1 mark for 'how the pages will link together'

Question 3 (e)

Overall candidates showed a solid understanding of file management with the majority of candidates gaining at least 1 of the 2 marks available with a significant number gaining both. Typically candidates identified the need to create suitable subfolders to group assets of similar purpose. However responses that addressed the need to rename some files using appropriate file names, were often too vague and did not allow the candidates to fully access this mark point.

This candidate is awarded 2 marks for an accurate response.

(e) **Figure 6** shows Mohinder's website assets folder.



Name	Type
advert	Macromedia Fireworks Doc
advert (2)	Macromedia Fireworks Doc
banner.b	B File
button	GIF Image
button1	Flash Movie
button3	GIF Image
button4	Flash Movie
button5	Macromedia Fireworks Doc
Download_Page_Pasic	HTML Document
Home_Page_Pasic	HTML Document
Untitled	GIF Image
Untitled 2	GIF Image
Untitled 3	GIF Image
Untitled 4	GIF Image

Figure 6

Suggest **two** ways that Mohinder could improve his file management.

- (2)
1. He could have sub folders for all the buttons and for the adverts.
 2. He could change the name of the folder from new folder to assets.



ResultsPlus Examiner Comments

- 1 mark awarded - Use of subfolders.
- 1 mark awarded - rename main/root folder.

(e) **Figure 6** shows Mohinder's website assets folder.

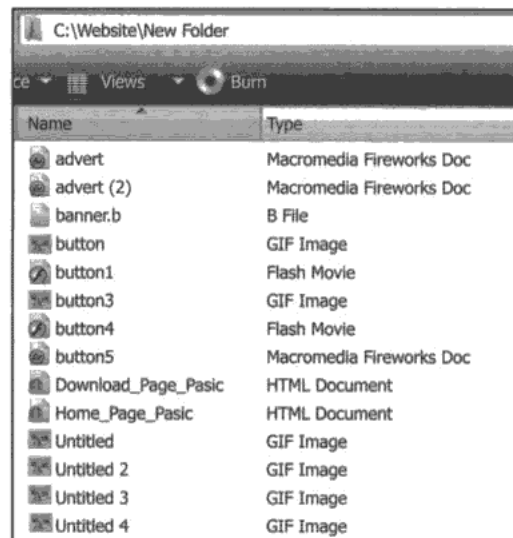


Figure 6

Suggest **two** ways that Mohinder could improve his file management.

(2)

1. Sort things into files e.g. a button files / advert file etc.
2. Name his files better names, e.g. his untitled files. In the future he may not know what it is and it saves time because he doesn't have to open each and every untitled file to see what it is.



ResultsPlus Examiner Comments

Here the candidate gains 1 mark for their second response.



ResultsPlus Examiner Tip

The use of technical language is important. Here the candidate does not show an understanding of the difference between files and folders and does not gain the first mark.

Question 4 (a)

The majority of candidates were able to identify at least one reason why this type of interactivity might have a negative impact on user experience.

Candidate responses tended to focus on the need to learn commands and/or the problems that users with lower literacy skills might encounter. Very few candidates considered the problems that typing on a mobile device would cause. To develop candidates' overall skill in digital design, they should explore how the selected platform/device of a product would influence the effectiveness, or not, of a chosen interface or design.

This candidate gains 2 of the 3 available marks.

- 4 Mohinder is creating a game for smartphones. Figure 7 shows a screen from the game.



Figure 7

- (a) The player is given an image and a text description of what is happening.

They then type in a command telling the character what to do next.

Give **three** reasons why this type of interactivity might have a negative impact on the user experience.

(3)

- 1 If Spelt Wrong the computer may not recognise the command
- 2 May take a loading time
- 3 involves reading - can be a problem if the user cannot read well.



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Examiner Comments

1 mark for incorrect entry of command.

1 mark for 'lower literacy users would not be able to use it'.

Question 4 (b)

As with previous series, candidates showed a good knowledge of flow charts and interpreting the logic displayed by them with most candidates being able to gain some credit. Where candidate responses did not gain higher marks this was usually due to missing out stages of the process. Candidates need to develop their exam technique when explaining the meaning of flow charts.

Here the candidate provides a good quality answer gaining 4 marks.

Describe how this section of the game works.

(4)

There is a picture of a door and the description of its surroundings.
If the player has not yet found the green key they must go back to
the previous screen. If they have then puzzle 2 is shown. The user then
types in the answer and if it is correct then an open door is
shown with the message "Door now open". If the answer is wrong the
puzzle is shown again and the player has another chance to get
it right.



ResultsPlus Examiner Comments

The response identifies and describes four suitable areas of the logic of the flow chart.

1 mark for displays image/description.

1 mark for 1st decision box checking of key found.

1 mark for player required to type answer to puzzle.

1 mark for 2nd decision box checking answer to the puzzle and deciding outcome.

Here the candidate gains 2 of the available 4 marks.

Describe how this section of the game works.

(4)

If the player has the key to the aforementioned door, it will open. Else, the player will be rejected and a new image will be displayed. If the player possesses a key, they will enter a puzzle. The puzzle will then require an answer. If this is correct, the door will open. If not, the player will return to the puzzle until it is correct.



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Examiner Comments

The candidate misses out descriptions of some of the parts of the flow chart and only provides descriptions of the two decision boxes.



ResultsPlus

Examiner Tip

Ensure all logic is fully explained when describing flow charts.

Question 4 (c) (i)

Candidate performance on this question was not as good as expected with the majority of candidates not gaining a mark. Common issues with candidate responses were either, confusing 'multimedia' and 'interactive' features, or providing 'multimedia' features that were not evident from the given stimulus material. Candidates need to develop decoding the command verbs in the questions and on identifying whether or not the question asks for suggested additions to the given stimulus or to identify examples of use within the stimulus.

Question 4 (c) (ii)

Candidates performed much better here than in Question 4(c)(i) with nearly all candidates able to identify a suitable interactive feature from the given stimulus. Again as with Question 4(c)(i) where candidates did not gain credit it was due to confusing 'interactive' and 'multimedia'.

Question 4 (d) (i)


Candidates performed well here with a large majority of candidates successfully identifying a suitable type of audio. Where candidates did not gain credit this was usually due to providing an example of a sound use rather than identifying the name of a particular 'type of audio' as listed in the specification.

This candidate gained 1 mark.

(d) (i) Mohinder's game will use a voice-over to explain the story.
Give **one** other type of audio Mohinder could include. (1)

He could use background music to make each part of the game exiting as the music will

Mohinder needs to cover the voice over feature. he link out to park



ResultsPlus
Examiner Comments

The explanation/example in this case are not needed. The mark was awarded for 'background music'.

Question 4 (d) (ii)

Candidates showed a good understanding of the drawbacks of creating one's own sound assets with the majority of candidates gaining at least 1 mark typically for identifying that the sound quality may not be as high as that recorded by a professional sound recording company. Candidates did not achieve the second mark if they did not identify the reason for lower sound quality, such as 'lack of professional standard equipment'.

This candidate provides a response that gains both marks. In this case the marks are awarded for the first part of the answer. Reference to accents or clear voices are irrelevant but can be ignored as marks have already been awarded.

(ii) Mohinder needs to source the voice-over for the game.

He could record it himself or use a specialist company.

Explain **one** possible drawback of Mohinder recording the sound himself.

(2)
He might not have specialist equipment to record his voice clearly, it may have background noise. His voice may not be easy to understand. He may have an accent or mumble, causing people to struggle.



ResultsPlus Examiner Comments

2 marks awarded.

1 mark for 'Specialist equipment needed'.

1 mark for 'record his voice clearly/background noise'.



ResultsPlus Examiner Tip

Focus answers on technical issues, such as equipment, software etc. The accent of the person recording the speech is irrelevant. They may want somebody with a particular accent.

Question 4 (e)

Candidate performance on this extended question was very pleasing with nearly all candidates producing responses that were able to gain some credit with the majority sufficient for level 2 (3-4 marks). Typically candidates were able to accurately identify how gender, age and accessibility requirements affect the choices made. Candidate responses generally made quite good use of examples to support their responses. These were sometimes a little too general and could have benefitted from more specific reference to particular products and how they might make use of colour. Further development of responses could have been made by discussing a wider range of factors that would affect the use of colour within the design of a digital product.

This is a level 2 response that gained 4 marks.

* (e) Colour is an important decision when designing a digital product. -gender
-age
-disabilities.

Discuss the considerations that would affect the use of colour when designing a digital product. (6)

One consideration would be gender. If the product is for both boys and girls then suitable colours for both genders need to be used. However, if it is for boys then colours such as blue and green need to be used as boys would appear to them more. In addition, for girls colours such as pink and red need to be used as they are more appropriate. Another consideration would be age. Depending on the age of the target audience certain colours need to be used. For younger children bright colours like pink and blue are more suitable, but for teenagers colours such as red, orange, green, more mature colours would be more appropriate. Finally, disabilities need to be considered. People with certain sight disabilities can only see certain colours. For example some people can only see browns, blues, reds, yellows. So, when designing a product there should

be an option where colours can be changed to suit different people and their disabilities



ResultsPlus Examiner Comments

A number of different considerations (age, gender, disabilities) were considered and used to support discussion.

A wider range with more detailed discussion was needed to move to Level 3.

It is at the top of Level 2, because it fully meets the descriptor: range of examples, supported by accurate explanation. QWC is appropriate at Level 2.

This is a Level 3 response that gained 6 marks.

*(e) Colour is an important decision when designing a digital product.

Discuss the considerations that would affect the use of colour when designing a digital product.

(6)

The theme of the product ~~the~~ must match the colour scheme, if the product is ~~horror~~ designed to be scary then the colour scheme should be dark; if it is designed to be funny and happy bright colours should be used. Another consideration is the target audience. Young children will enjoy bright colours whilst ~~and~~ as they enjoy it more than dark colours. Adults prefer more subtle colours which makes the ~~work~~ product seem more respectable. The designer must also consider the interests of the target audience, people ~~who~~ who enjoy water sports will like sea blue colours; people who enjoy outdoor activities or the environment will like green. There is also the company colours to consider. The product should not be different colours to the company colours. For example Coca-Cola products use red and Cadburys use purple. The colour of the product should be ^{recognisable} ~~recognisable~~ as from the company owning the

product. ~~Finally~~ On top over that accessibility must be considered. The colour scheme for the background should not be bright if the text is bright. The designer must ensure that there is a big enough contrast between the text colour and the background to ensure it is readable. The colours dictate the mood of the user when they use the product, it should create the mood that is intended.



ResultsPlus

Examiner Comments

A very good response.

The candidate uses a wide range of examples (theme of the product, age, house style, accessibility, mood). Examples are well chosen and supported by accurate discussion.

QWC is appropriate at Level 3.

Question 5 (a) (i)

The number of candidates gaining at least 1 of the 2 marks available was not as high as would be expected, with only just over half of the candidates gaining credit. Where responses were not able to gain credit, this was usually due to a lack of understanding of 'accessibility features' on a website, ie a feature that can be activated when required such as switching fonts or adjusting the font sizes. Candidates who did not gain marks tended to provide answers such as 'use larger fonts' which is not the same as being able to scale the fonts as required. Candidates should be aware of the 'accessibility features' as listed in the specification.

Here the candidate gains 2 marks.

5 Jenny wants to make the *CoolApps* website more accessible.

(a) (i) Identify **two** accessibility features that could be added.

(2)

1 Adjustable font size

2 'Listen to page' audio button.



ResultsPlus
Examiner Comments

This candidate shows a solid understanding of the key 'accessibility features' listed in the specification. Concise accurate responses provided - 2 marks.

5 Jenny wants to make the *CoolApps* website more accessible.

(a) (i) Identify **two** accessibility features that could be added.

(2)

1 Larger font size

2 Voice overs to read the text.



ResultsPlus
Examiner Comments

1 mark is awarded.

Larger font size - 0. 1 mark given for 'voice over to read the text', which is just enough for 'listen to this page' feature.



ResultsPlus
Examiner Tip

'Larger font size' does not mean it is adjustable. Candidates should be aware of the accessibility features as listed in the specification.

Question 5 (a) (ii)

This question was aimed to test the understanding of the most able candidates. Typically, candidate responses on this question were too vague and responses such as 'easy to read' were often seen. Given the scenario, responses such as 'easy to read' were not permissible as this was implied in the question. Candidates were required to identify a feature of the font that makes it suitable/'easy to read'.

Here the candidate is awarded 2 marks.

The first part of the response (easier to read) does not gain credit. Credit is awarded for the candidate's second sentence.

(ii) Jenny wants to be sure the site is suitable for partially sighted users.
She has two fonts to choose from.

Font 1	Font 2
--------	--------

Explain why Font 1 would be more suitable than Font 2 for partially sighted users. (2)

Font 1 is bigger. It is simple and easy to read. Font 2 has Font 1's letters are separate, so there will be no problem with letter identification.



ResultsPlus
Examiner Comments

2 marks awarded.

Letters are separate 1 mark no problems with letter identification 1 mark.

Font 1 is a sans-serif font (unlike Font 2) so it's much easier to read. (2)
Font 1 is also in bold so it stands out more.



ResultsPlus
Examiner Comments

1 mark awarded 1 mark for feature (San serif).
Easier to read is not accepted.

Question 5 (a) (iii)

The majority of candidates did not gain credit on this question. It is essential that candidates know about all 'factual' and 'technical' information, such as the Disability Discrimination Act and other key terms, as listed in the specification. These are a key part of understanding digital design in context.

Question 5 (a) (iv)

The majority of candidates were able to provide a suitable benefit of ensuring products were accessible. Most common responses provided by candidates eluded to increasing the audience base. Where candidates did not gain credit, responses such as 'make the products so everybody can use them' were amongst the most frequent. These responses are inaccurate as accessibility features do not make a product suitable for everybody only widen the scope of potential users.

Question 5 (b) (i)

The majority of candidates did not gain credit here and of those who did, very few gained more than 2 of the available 4 marks. Answers provided were mainly generic 'testing' answers and showed a lack of understanding of specific methods of testing stability. Candidates should know about all areas of types of testing and understand methods to ensure this testing is carried out.

Much of this response is dealing with areas of testing that have no relation to testing the 'stability' of a product. A common error that 'different devices' is testing compatibility and not stability cannot be credited. 'Use of test log' is too vague so again no credit can be given.

(b) (i) Mohinder must test all aspects of his digital products.

Explain how Mohinder might test the stability of his digital products.

(4)

He could test it on several digital devices, smart phones, tablets and PCs to see if the site was stable on all platforms. He could write a test log to record any issues to fix. Test it multiple times by many people to test its robustness, could enter unsupported values into data fields to see if it copes, what happens and change it if necessary. He would see if all the important features worked



ResultsPlus
Examiner Comments

The candidate makes some reference to stability testing by mentioning the number of people using it 1 and entering rogue data 1 to test the validation 1.

Question 5 (b) (ii)

Candidates clearly had a strong grasp of the need to retest a product when changes are made and most candidates were able to gain at least 1 of the 2 marks available with the majority of candidates gaining both.

(ii) Mohinder's testing has identified some errors that he needs to fix.

Give **two** reasons why it is important for Mohinder to re-test the products after he has fixed the errors.

(2)

- 1 So that he can see whether the changes he has made have corrected the initial error or not.
- 2 So that he can see whether any changes he has made have altered the functioning of another part of the product's performance that may need to be corrected.



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Examiner Comments

This candidate gains 2 marks.

1 mark for 'See if changes made have fixed the problem'.

1 mark for 'See if another error has been caused by the changes'.

(ii) Mohinder's testing has identified some errors that he needs to fix.

Give **two** reasons why it is important for Mohinder to re-test the products after he has fixed the errors.

(2)

- 1 to make sure the errors are fully fixed
- 2 to make sure he hasn't made the errors worse.



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Examiner Comments

1 mark awarded.

1 mark for ensuring errors are fixed no mark for repeated point.

Question 5 (c)

Candidate performance varied significantly on this extended writing question, as would be expected, but the results were not as good as on question 4(e). It was clear that many candidates were not aware of the roles that background research and profiling play in the early stages of designing a digital product. Many were unable to distinguish between profiling and research, and many referred to its use at the end of development and in the testing stage, rather than in a way of informing early development. Better candidates were able to provide some examples, but the scope of these was limited and often did not focus on some of the key factors that would be identified through these processes.

This is a Level 1 response which gained 1 mark.

* (c) Discuss how Mohinder might use information collected from background research and audience profiling to ensure that the CoolApps website is fit for purpose.

Use examples to illustrate your answer.

(6)

He could create questionnaires to give to people and ask them whether they think that the product is what they wanted it to be. He could look at other websites and see if CoolApps has used the same properties. He could ask people of his target audience to test his website to see if they are able to navigate around easily. He could even ask members of the general public to test his product to see whether they think it is accessible. He could ask website reviewers to test out his product and get back their verdict on what they think.



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Examiner Comments

Credit was given for the section about 'researching existing websites', but insufficient to reach the top of Level 1.

The candidate's reference to the audience is more focused on the testing of the finished products rather than profiling, and therefore not relevant to the question.

QWC is fine at this Level 1.

This is a Level 3 response which gained 5 marks.

* (c) Discuss how Mohinder might use information collected from background research and audience profiling to ensure that the CoolApps website is fit for purpose.

Use examples to illustrate your answer.

(6)

Mohinder can look at other products similar to the product he is making, the CoolApps website. By researching different existing websites, he can evaluate the strengths and weaknesses of those products so he can pick up on the strengths they have and know what weaknesses to avoid. A website may use certain multimedia functions such as video files or sounds. This can give Mohinder ideas on where his site is not fit for purpose. By looking at weaknesses such as long loading times, poor picture quality etc. he can decide where to improve his website so he can make it more fit for purpose. By doing audience profiling he can research his target audience. This allows him to decide on what they prefer and what they ~~do~~ dislike. But evaluating his target audience's preferences he can ensure that everything they enjoy or prefer is available in the website and everything they dislike is not. This can include things like forums which may be popular amongst the target audience and things like on-screen adverts and pop-ups which may be highly unpopular. By tailoring the website to the target audience's wants and most importantly needs, such as information etc., Mohinder can make the website entirely fit for purpose.

(Total for Question 5 = 18 marks)



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Examiner Comments

A well structured answer that addresses profiling and research and how these would affect the final product.

The candidate uses valid examples (for profiling: onscreen adverts, being unpopular; for research: weaknesses of the sites such as long loading times).

The response is in Level 3, but the range of outcomes discussed is not sufficient for full marks. QWC is appropriate for Level 3.

*c) Discuss how Mohinder might use information collected from background research and audience profiling to ensure that the CoolApps website is fit for purpose.

Use examples to illustrate your answer.

(6)

If Mohinder had found out that most of his target audience prefer a basic layout, then he can incorporate that into his design. As well as this Mohinder could research other music apps, and by doing this he can ensure that his app is unique and does what it says, for example if Mohinder found that the music apps already on the market don't offer video, then he shouldn't as the purpose of his app is to provide music not videos. If he had sent out a questionnaire about what font to use e.c.t, this would ensure it was fit for purpose as he is using information that his target audience wants.



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Examiner Comments

Level 2 - 3 marks. The candidate makes accurate reference to the use of audience needs and research of existing products. The response makes good use of examples from the given context and combines this with an understanding of the processes involved ie 'research products to ensure yours are unique'. The response is well organised and clearly explained, but does not identify enough 'ways', in context, to reach the top of Level 2. QWC does not need to be considered, but is fine at this level.

Paper Summary

Based on their performance on this paper, candidates are offered the following advice:

- Continue greater use of the given scenario within responses as answers should be contextual.
- Develop exam technique to fully address questions rather than just repeat knowledge.
- Improve the range of knowledge across all aspects of the specification.
- Ensure exposure to the full spectrum of design and development processes in the context of a developing project.
- Make links between practical units 2 and 4 and the content of this unit.
- Ensure more specific examples that relate to the given scenario are used in responses.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

<http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx>

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