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Surname

Other names

Pearson
Edexcel GCSE

Centre Number

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Candidate Number

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Information and Communication Technology

Unit 3: Exploring Digital Design

Thursday 17 May 2018 – Afternoon
Time: 1 hour 30 minutes

Paper Reference

5IT03/01

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed
– *you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.*

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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Pearson

Brandon owns and runs a website that provides information on how to solve a range of ICT-related problems.

He wishes to expand the types of service he offers and is planning to create a range of digital products as part of this expansion.



Figure 1



Answer ALL questions. Write your answers in the spaces provided.

Some questions must be answered with a cross ☐. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☐.

- 1 Brandon is producing an app for mobile devices that will allow users to access the content on his website.

Figure 1 shows a prototype of his app.

- (a) Identify **three** ways that the app could be made more suitable for use on a mobile device.

(3)

1

.....

2

.....

3

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- (b) (i) The app will include a number of file types.

Which **one** of these is used for images?

(1)

- ☐ **A** WAV
- ☐ **B** MP3
- ☐ **C** AVI
- ☐ **D** JPG

- (ii) Brandon uses some images created by other people.

Which **one** of these methods could Brandon use to avoid copyright problems?

(1)

- ☐ **A** Scan images from a newspaper article
- ☐ **B** Download images from public domain sources
- ☐ **C** Save images as a different file format
- ☐ **D** Add his name to images using graphic editing software



- (c) The app will show videos of Brandon explaining how to solve ICT-related problems.

The videos will be stored online and streamed to the app.

- (i) Give **one benefit** to users of streaming videos rather than downloading them.

(1)

- (ii) Give **one drawback** to users of streaming videos rather than downloading them.

(1)

- (iii) One video uses a voice-over.

State **one other** type of audio that could be used in the videos.

(1)

- (d) A 'mock-up' of the app was created using interactive multimedia software.

State **two** reasons why designers create a 'mock-up' during the early stages of the development of a digital product.

(2)

1

2



(e) Brandon wants the website and the app to be consistent.

(i) The website and the app will use the same house style.

State **two** design features that are included in a house style.

(2)

1

.....

2

.....

(ii) Brandon repurposes images from the website for use in the app.

Give **two** changes Brandon might make to the images when repurposing.

(2)

1

.....

2

.....

(Total for Question 1 = 14 marks)



- 2 Brandon is planning to produce a monthly e-zine for users of the website.

Figure 2 shows a page from the e-zine.

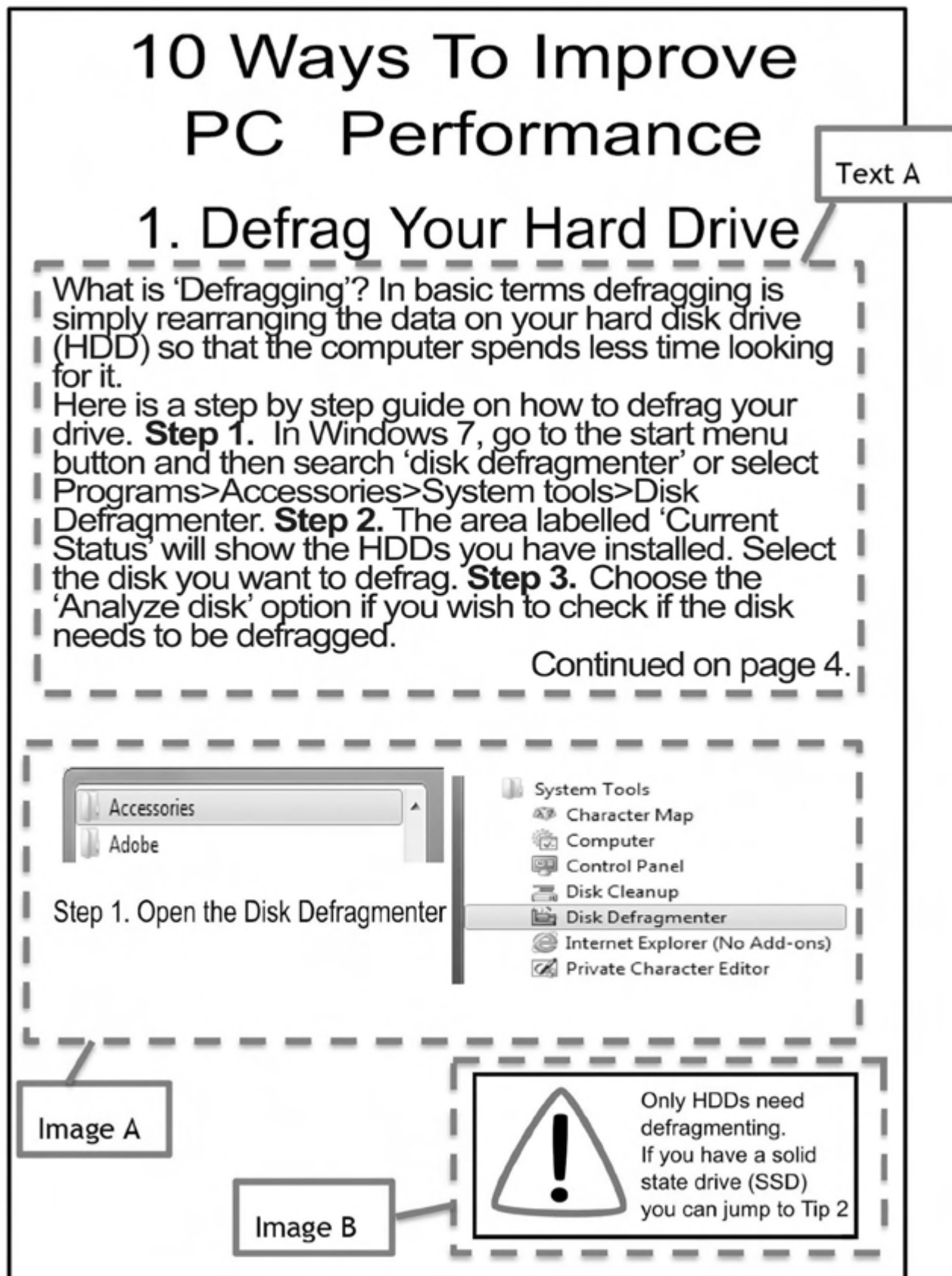


Figure 2



(a) Brandon wants to improve this version of the e-zine.

(i) Look at the section labelled 'Text A' in **Figure 2**.

State **two** ways that the layout of this section could be improved.

(2)

1

2

(ii) Look at 'Image A' in **Figure 2**.

What is the purpose of this image?

(1)

- ☐ **A** To inform
- ☐ **B** To persuade
- ☐ **C** To influence
- ☐ **D** To entertain

(iii) Look at 'Image B' in **Figure 2**.

Brandon has used a vector image. When he enlarges this image the quality of the image does not change.

Explain why the quality of 'Image B' does not change when enlarged.

(2)

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.....



(b) Users sign up to receive the e-zine using an online registration form.

Figure 3 shows the logic for part of the registration process.

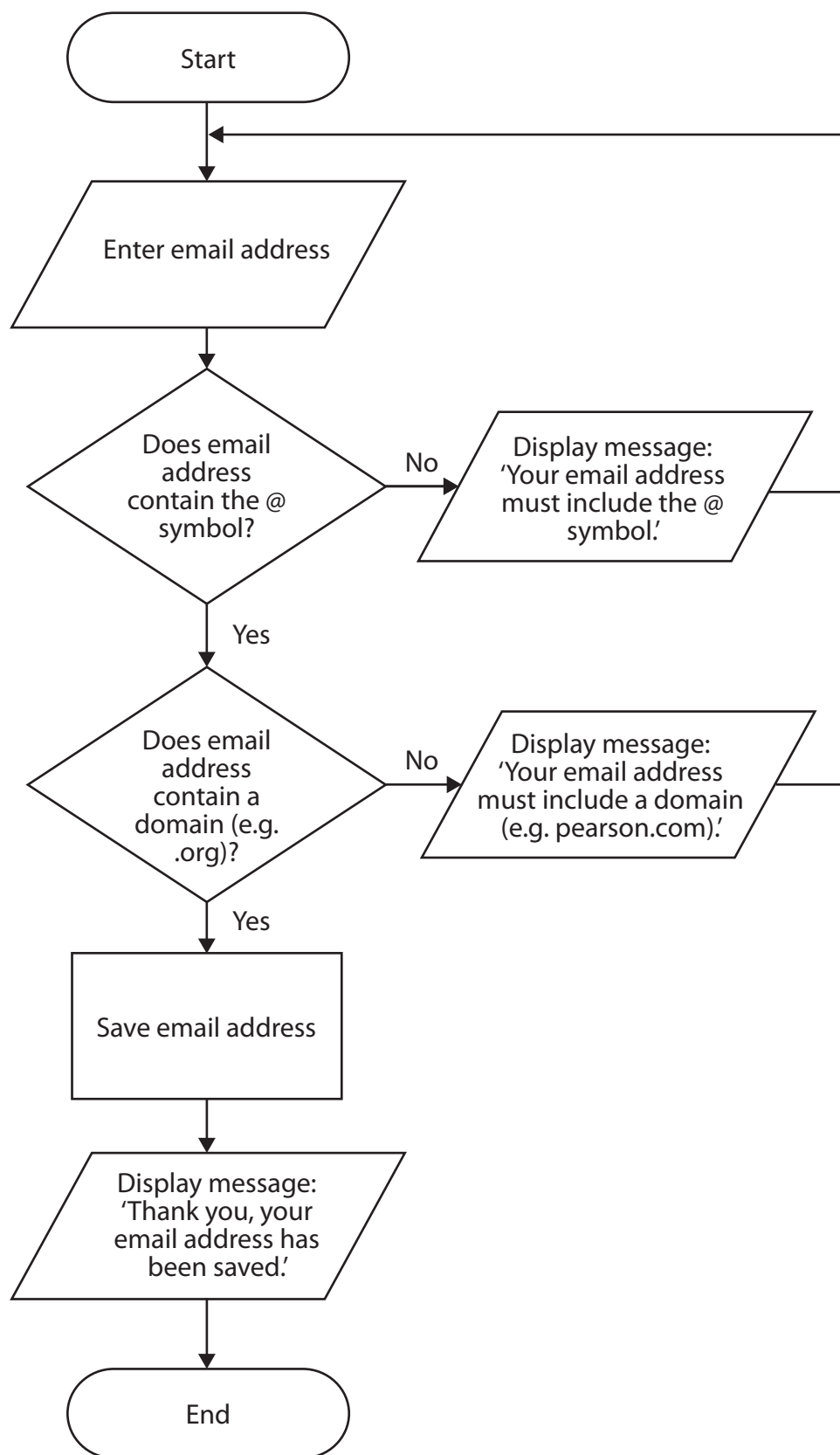


Figure 3



(i) Describe the purpose of the process in **Figure 3**.

(3)

(ii) The table shows data that has been entered using the form.

Complete the table to show the output message the user would receive.

(4)

Data entered	Output
Brandon@email.com	
Email@brandon	
brandonemail.com	
Brandon	

(c) The e-zine will be sent as an email attachment.

Explain why Brandon compresses the images in the e-zine.

(2)

(Total for Question 2 = 14 marks)



P 5 7 0 4 5 A 0 9 2 4

3 Brandon will create banners to advertise his website.

(a) This is the specification for a banner.

Advertisement banner specification

Company name: Brandon's ICT Services

The banner must include:

- the company logo
- a hyperlink to Brandon's website
- animation.

Sketch a suitable design that matches this advertisement banner specification.

Use **Area A** for your design.

Use **Area B** for annotations.

Include enough detail so that the design could be easily used by others to create the animation.

(5)

Area B

Area A



(b) Brandon creates another banner.

(i) He adds an image to the banner.

Figure 4 shows the image.

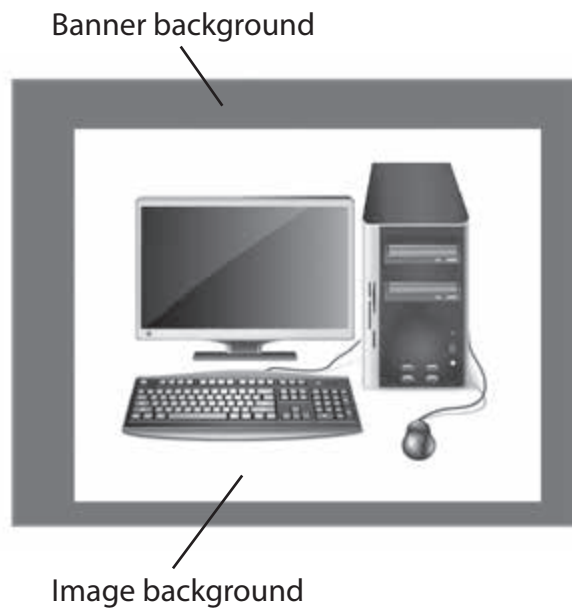


Figure 4

Brandon wants to remove the white area from the image background.

Describe how graphic editing tools could be used to do this.

(3)

.....

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.....

.....

.....

(ii) **Figure 5** shows the file properties of the banner.

Name:	BannerMain.tiff
Type:	Image (TIFF)
Size:	4.3MB
Location:	/home/Brandon/website

Figure 5

Explain why the TIFF file type may cause problems when the banner is used in a website.

(2)

(c) **Figure 6** shows a 'rule of thirds' grid for a banner design.

Figure 6

Describe how the 'rule of thirds' grid should be used when designing the banner.

(2)



(d) Brandon uses versioning as part of his file naming conventions.

Give **two** reasons why versioning should be used.

(2)

1

.....

2

.....

(e) Brandon adds sound to a banner that will be used on a website.

Describe **one** way this could have a negative impact on user experience.

(2)

.....

.....

.....

.....

(Total for Question 3 = 16 marks)



4 Brandon wants to update his website.

(a) (i) He changes the design of the web pages.

Which **one** of these documents would Brandon use to show the design of a web page?

(1)

- ☐ **A** Moodboard
- ☐ **B** Storyboard
- ☐ **C** Script
- ☐ **D** Site map

(ii) State **one** design tool that Brandon could use to ensure that the same layout is applied to all web pages.

(1)

(iii) **Figure 7** shows a font that Brandon could use for his website.

Reviews Section

Figure 7

Give **two** reasons why the font in **Figure 7** may be a poor choice.

(2)

- 1
- 2



- (b) Some of the users of Brandon's website cannot read English very well.

Describe how **one** design feature could make the website easier for them to use.

(3)

- (c) Describe **one** method Brandon could use to gather information **about users** of his website.

(3)

- (d) Brandon is going to provide a mobile version of his website.

Explain **one** way in which the mobile version of a website will differ from the 'desktop' version.

(2)



*(e) Brandon includes a range of accessibility features on his website.

Analyse how these features would support users who find it difficult to use the website.

(6)

(Total for Question 4 = 18 marks)



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QUESTION 5 BEGINS ON THE NEXT PAGE.



- 5 Brandon is going to add a store to the website where people can buy spare parts for their digital devices.

The website will use a database.

Figure 8 shows part of a data entry form.

Title
e.g. Mr, Mrs, etc.

First name

Surname

Address line 1

Address line 2

Postcode
e.g. CF10 1NS, SE71 7PB

Step 1 of 3

Next

Figure 8

- (a) (i) Describe how Brandon could use **one** design feature to improve the validity of data in the 'Title' field.

(3)



(ii) The form in **Figure 8** contains a button.

The button text resizes when the user places their mouse pointer over the button.

Give **two** other design features Brandon could use to alert the user that they have interacted with the button.

(2)

1

2

(b) Brandon tests the 'Postcode' field of the form in **Figure 8**.

Describe **two** tests that Brandon could perform to make sure that users can only enter postcodes that meet preset criteria.

(4)

Test number	Description of test
1	
2	



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(c) Explain why it is important that Brandon tests the stability of the website when the store is added.

(3)



* (d) Brandon creates the web pages for the store he is adding to the website.

Discuss how layout will affect the usability of these web pages and how this will impact on the store's success.

(6)

(Total for Question 5 = 18 marks)

TOTAL FOR PAPER = 80 MARKS



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