

Write your name here

Surname

Other names

Centre Number

Candidate Number

**Edexcel GCSE**

# Information and Communication Technology

## Unit 3: Exploring Digital Design

Tuesday 17 January 2012 – Morning  
**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.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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1/3/3

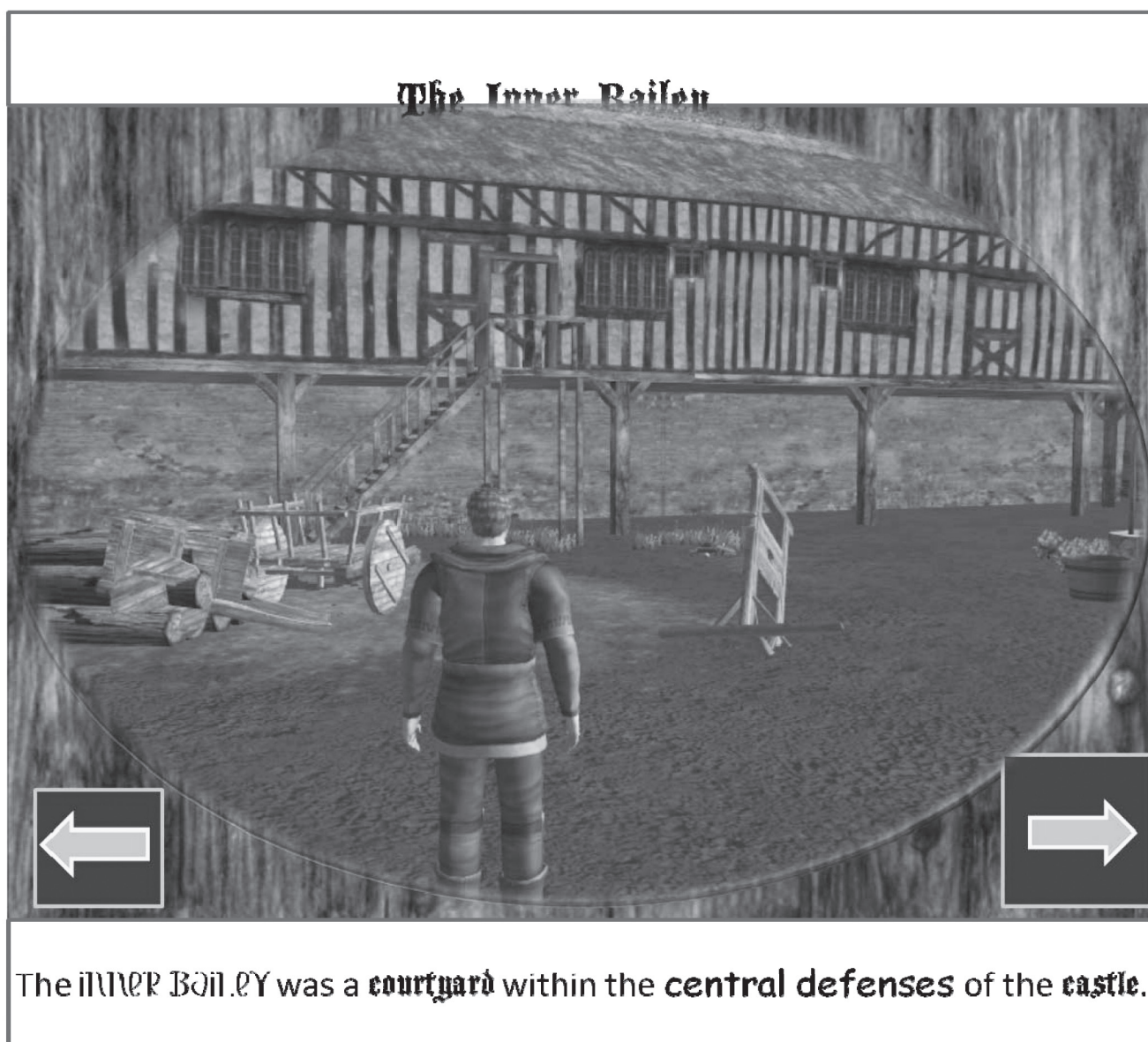


P 4 0 7 1 5 R A 0 1 2 0

**PEARSON**

Katherine creates digital products for young children.  
She is developing an e-book about Medieval England.

**Figure 1** shows a page from the e-book.



**Figure 1**



**Answer ALL questions.**

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

**1** (a) **Figure 1** shows a page from the e-book. Katherine knows it could be improved.

- (i) One improvement that could be made to the page is to correct the spelling of the word 'defenses'.

State **four** other ways in which the page could be improved.

**(4)**

1 .....

2 .....

3 .....

4 .....

- (ii) Katherine uses text and images in the e-book.

Give **three** other multimedia elements she could use.

**(3)**

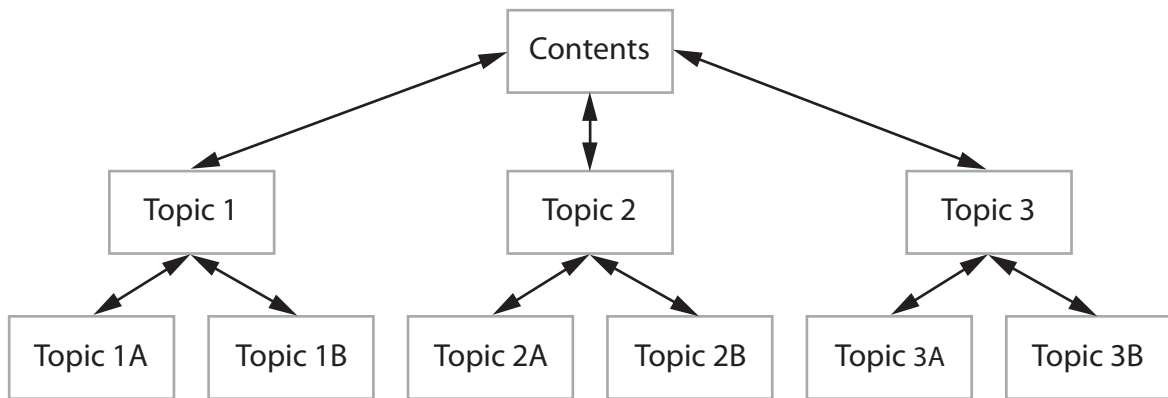
1 .....

2 .....

3 .....



(b) Here is the structure diagram for part of the e-book.



(i) Describe the purpose of a structure diagram.

(2)

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(ii) Katherine uses these images as buttons in the e-book.



Give **two** reasons for using images as buttons.

(2)

1 .....

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2 .....

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(iii) Katherine wants to make the pages of the e-book consistent.

State **three** ways in which she can do this.

(3)

1 .....

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2 .....

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3 .....

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**(Total for Question 1 = 14 marks)**



2 (a) Katherine always creates a plan before starting work.

Here is her partly completed plan for the e-book.

January		February	March	April	May
Create moodboard	Create storyboards	Write script			Produce final version

(i) State **four** tasks that Katherine must complete between writing the script and producing the final version.

(4)

1 .....

2 .....

3 .....

4 .....

(ii) Katherine creates a moodboard for the e-book.

Give **two** reasons for producing a moodboard.

(2)

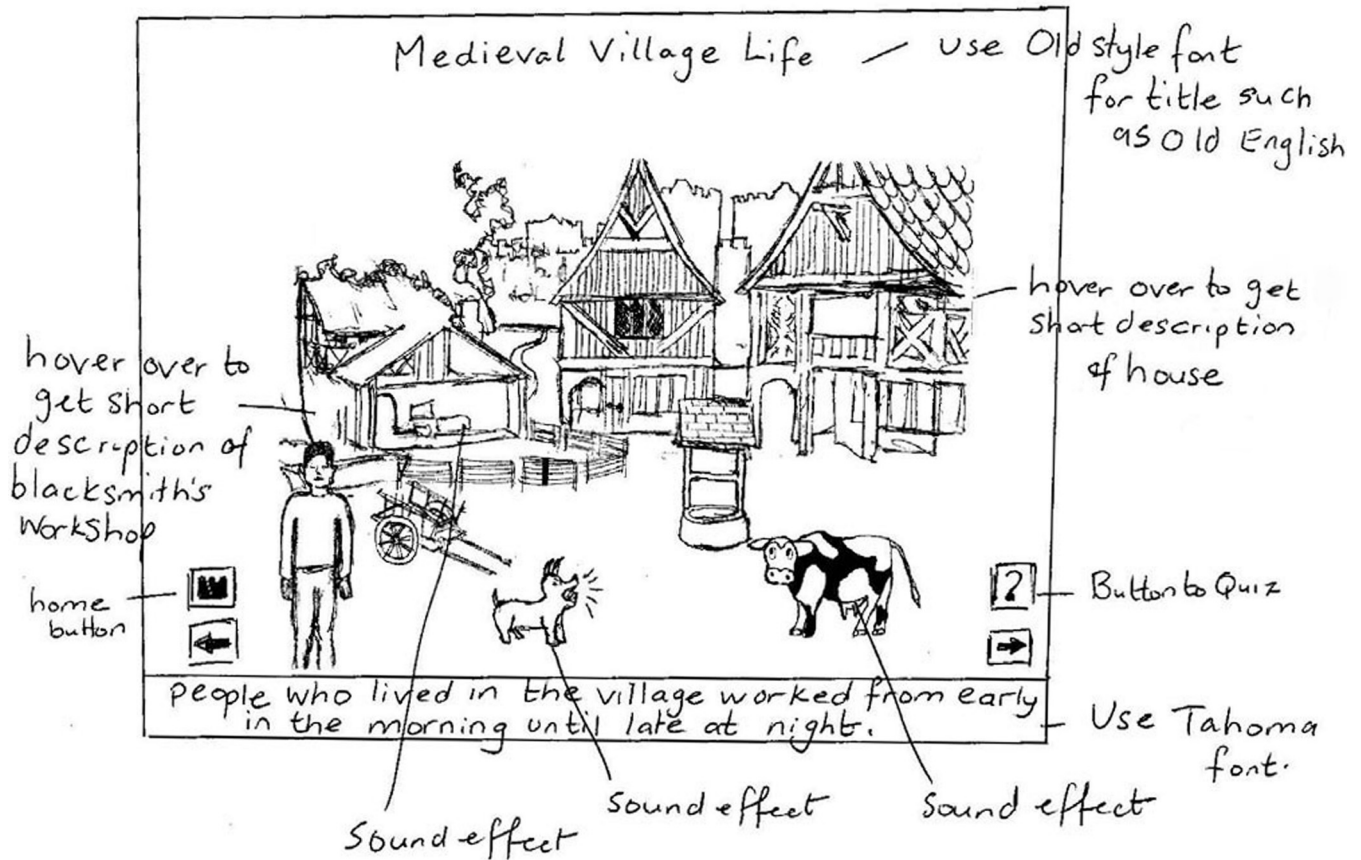
1 .....

2 .....



(b) Here is the storyboard for a page of the e-book.

The storyboard uses simple language for the text of the e-book.



(i) Identify **three** other features on the storyboard that make the e-book page suitable for its target audience.

(3)

1 .....

2 .....

3 .....







(iii) Explain why Katherine has used a drop down menu for the age field.

(2)

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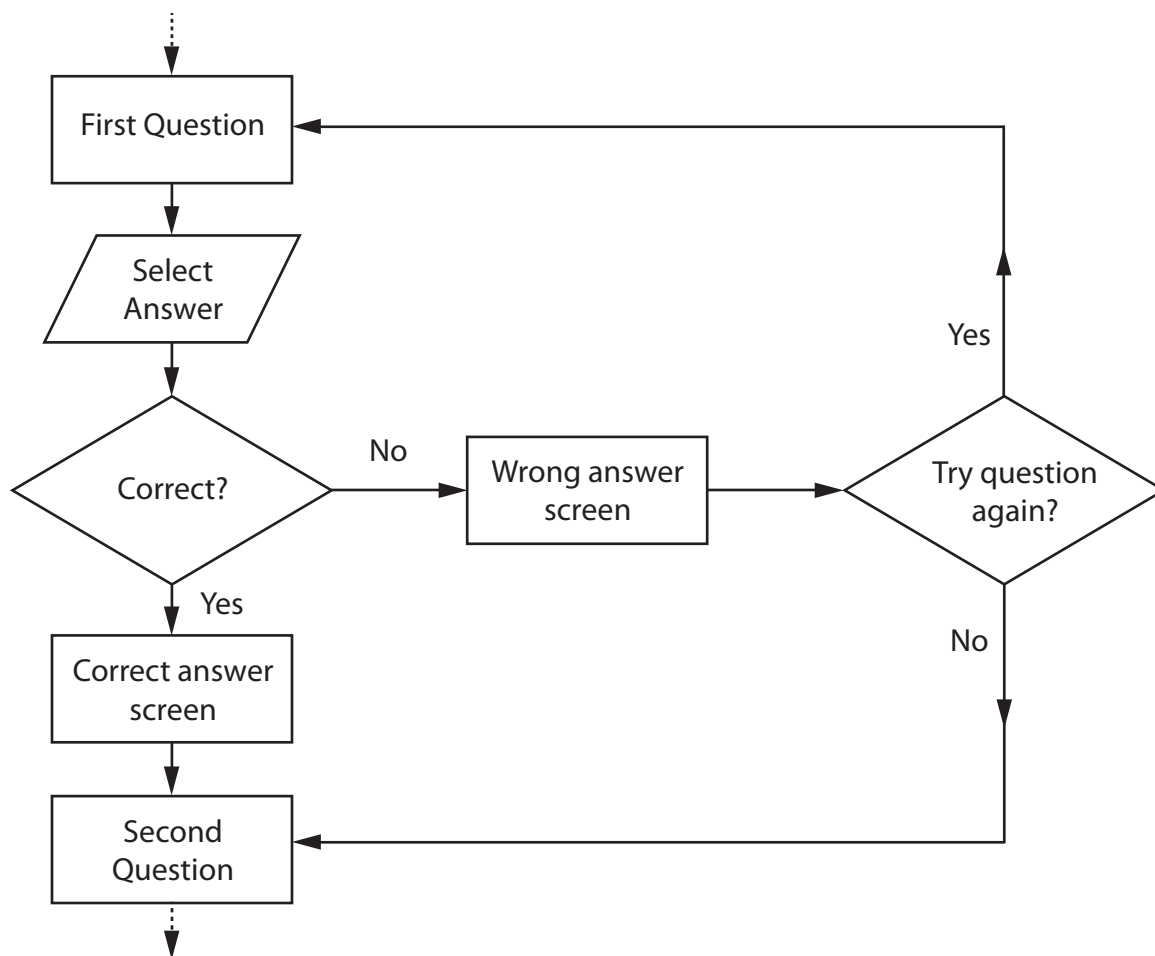
**(Total for Question 2 = 14 marks)**

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3 Katherine uses a flowchart to plan the quiz.

(a) Here is part of the flowchart for the quiz.



(i) Describe what happens in the part of the quiz shown in the flowchart.

(4)

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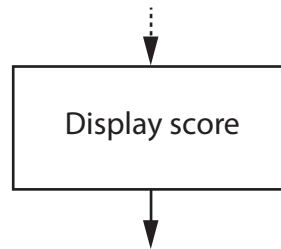
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- (ii) The quiz has ten questions. At the end of the quiz the score is displayed. If a user scores six or more, a 'well done' screen is displayed. Otherwise, a 'better luck next time' screen is displayed.

Complete this part of the flowchart.

(2)



(iii) Katherine uses specialist software to create flowcharts.

Give **two** reasons for using specialist software.

(2)

1 .....

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2 .....

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(b) John is a photographer. Katherine has asked him to produce some video clips for the quiz.

(i) John wants to film at a local castle.

State what he must do to comply with legal requirements before he starts filming.

(1)

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(ii) Video files can be saved in a number of different formats.

Which **one** of these file types is suitable for video?

(1)

**A** .gif

**B** .oop

**C** .exe

**D** .avi



(c) John has also taken some photographs for the quiz.

(i) Image files can be saved in a number of different formats.

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

(1)

A .jpg

B .txt

C .ppt

D .swf

(ii) John wants to reduce the file size of one of the photographs.

Give **two** ways he can do this.

(2)

1 .....

2 .....

(iii) Give **one** disadvantage of reducing the file size of the photograph.

(1)

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(iv) Katherine could use photographs from the internet for the quiz.

State **two** disadvantages of doing this.

(2)

1 .....

2 .....

**(Total for Question 3 = 16 marks)**



4 (a) Katherine is adding audio to her e-book.

(i) One type of audio Katherine could use is sound effects.

Give **two** other types of audio she could use.

(2)

1 .....

2 .....

(ii) Katherine now needs to source her sound effects.

Give **two** ways she could do this, and give **one** disadvantage for each.

(4)

1 .....

Disadvantage 1 .....

2 .....

Disadvantage 2 .....

(iii) Explain why balance needs to be considered when combining different types of audio.

(3)

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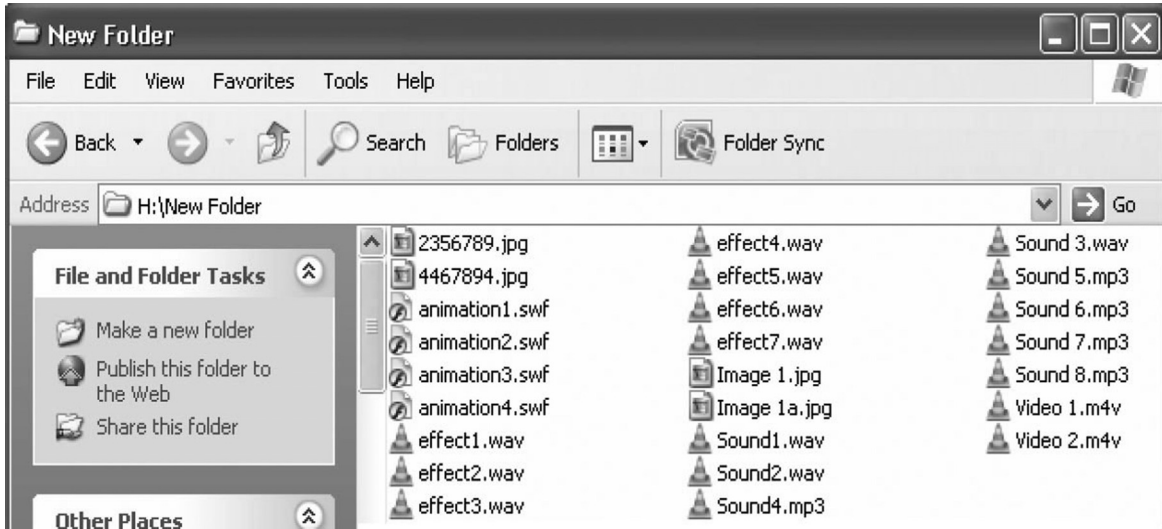
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(b) Katherine has a large number of files for each e-book which she has to manage.



Describe a file management structure that Katherine could use to organise her files efficiently.

Use a diagram if you wish.

(3)

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**Question 5 begins on the next page.**



5 (a) Katherine needs to test the links in her e-book.

This shows part of the test log that Katherine used when creating her e-book.

Test number	Description of test	Expected outcome	Actual outcome	Action required
1	Click on quiz button	Quiz page opens	Quiz page opens	None
2	Click on home button	Home page opens	Quiz page opens	

(i) Describe what the 'Action required' would be for Test 2.

(2)

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(ii) What type of testing does the test log show?

(1)

- A Usability
- B Security
- C Functionality
- D Accessibility



(b) Katherine takes the e-book into some local primary schools for the children to use.

(i) Explain why she needs to gather information from the children and their teachers.

(3)

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(ii) State **two** methods she could use.

(2)

1 .....

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2 .....

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(c) Katherine wants to ensure that her e-books are accessible.

(i) Identify **two** accessibility features she could use.

(2)

1 .....

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2 .....

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(ii) Explain why Katherine needs to use accessibility features in her e-books.

(2)

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