



# Digi-Trailblazers

## Sample

### Examination Paper

Candidate name: \_\_\_\_\_

Centre name: \_\_\_\_\_

- Write your name and the name of your centre above.
- The exam is 90 minutes:
  - 45 minutes for Parts A and B
  - 45 minutes for Part C.
- Complete all of the questions.
- Write all of your answers to Part A and Part B on this booklet. Write these answers in pen.
- Part C will be completed using a computer.

Ask your teacher if you are not sure what to do.

## Part A: Understanding Computing (20 marks)

Circle ONE (1) correct answer from A, B, C or D for each question

Each question is worth 4 marks

### Question 1

Which ONE (1) of the following can be used to protect your identity online?

- A An ALU  
B Firewall  
C Web browser  
D Forum

4 marks

### Question 2

Which ONE (1) of the following is a connection point between hardware and software?

- A A router  
B The keyboard  
C A port  
D Word-processing software

4 marks

### Question 3

Which ONE (1) of the following is **not** part of a CPU?

- A A CU  
B A mouse  
C A register  
D An ALU

4 marks

### Question 4

Which ONE (1) of the following is an image file?

- A .pdf  
B .txt  
C .jpeg  
D .wav

4 marks

### Question 5

A process that repeats in a computer program is called...

- A** A branch
- B** An iteration
- C** An IDE
- D** Java

**4 marks**

## Part B: Computing in Focus (30 marks)

Write the correct answer for each question in the space provided

### Question 6

- a) List ONE (1) way that you could collect data.

1 marks

- b) Design a spreadsheet that models the number of days that it has rained each month between January and April. The number of days that it has rained are:

- January: 14
- February: 10
- March: 12
- April: 4

Plan your design in the template below:

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

8 marks

**Question 6 continues on the next page**

**Question 6 (continued)**

c) Write a formula to calculate the number of days that it has rained since January.

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**2 marks**

d) How can you test the accuracy of the spreadsheet?

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**2 marks**

**Question 7**

a) List TWO (2) different computer models.

1 

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2 

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**2 marks**

b) List TWO (2) different things that use a computer system.

1 

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2 

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**2 marks**

c) Convert the number 60 into binary.

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**2 marks**

**Question 8**

a) List TWO (2) tasks performed by operating system software.

1 \_\_\_\_\_

2 \_\_\_\_\_

**2 marks**

b) What search terms would you type into a search box if you wanted to find recipes that do not contain meat?

\_\_\_\_\_

**2 marks**

**Question 9**

a) You should always plan the different steps that a computer program needs to follow before you write the code. Give ONE (1) example of how you might do this.

\_\_\_\_\_

**2 marks**

b) List TWO (2) reasons why your school might connect its computers using a bus network topology.

1 \_\_\_\_\_

2 \_\_\_\_\_

**2 marks**

**Question 10**

a) List TWO (2) reasons why you should use anti-malware software.

1 \_\_\_\_\_

2 \_\_\_\_\_

**2 marks**

b) You have discovered that one of your friends has been bullying another pupil on a social networking site. What could you do about this?

1 \_\_\_\_\_

2 \_\_\_\_\_

**2 marks**

## Part C: Using Computers (50 marks)

### Question 11

- a) Use presentation software to produce THREE (3) slides with the titles shown on each slide below.

<p>Three types of digital artefact</p> <ol style="list-style-type: none"><li>1.</li><li>2.</li><li>3.</li></ol>	<p>Three software tools used to make or revise digital artefacts</p> <ol style="list-style-type: none"><li>1.</li><li>2.</li><li>3.</li></ol>	<p>Two features of a well-designed digital artefact</p> <ol style="list-style-type: none"><li>1.</li><li>2.</li></ol>
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Choose a layout, font and colour scheme for your slides that you think your teacher would like. The colours, font and font size should be the same on all slides.

**10 marks**

- b) Apply animation to the title on every slide.

**4 marks**

- c) Fill in the information required on each slide.

**8 marks**

Inform your teacher when you have finished. Your teacher will save your work and ask you to print your slides.



**Question 12**

- a) Imagine that you have been asked to write a simple calculator program that gives users a choice of adding two numbers together or subtracting one number from another number.

Two examples of the commands and syntax that you would use in a program like this are given below. List TEN (10) more examples.

**Program name**

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**Variables**

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- 1 

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- 2 

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- 3 

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- 4 

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- 5 

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- 6 

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- 7 

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- 8 

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- 9 

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- 10 

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**10 marks**

- b) List TWO (2) errors that you might find in the code of your program.

- 1 

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- 2 

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**4 marks**

- c) How would you identify and fix an error in your program?

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**4 marks**

**Question 13**

Write an algorithm that shows the steps that you take to arrive at school before 8.30am.

**10 marks**

**End of paper**