



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
International General Certificate of Secondary Education

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**INFORMATION AND COMMUNICATION TECHNOLOGY**

**0417/11**

Paper 1

**October/November 2013**

**2 hours**

Candidates answer on the Question Paper.

No Additional Materials are required.

**READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid.

**DO NOT WRITE IN ANY BARCODES.**

No marks will be awarded for using brand names of software packages or hardware.

Answer **all** questions.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [ ] at the end of each question or part question.

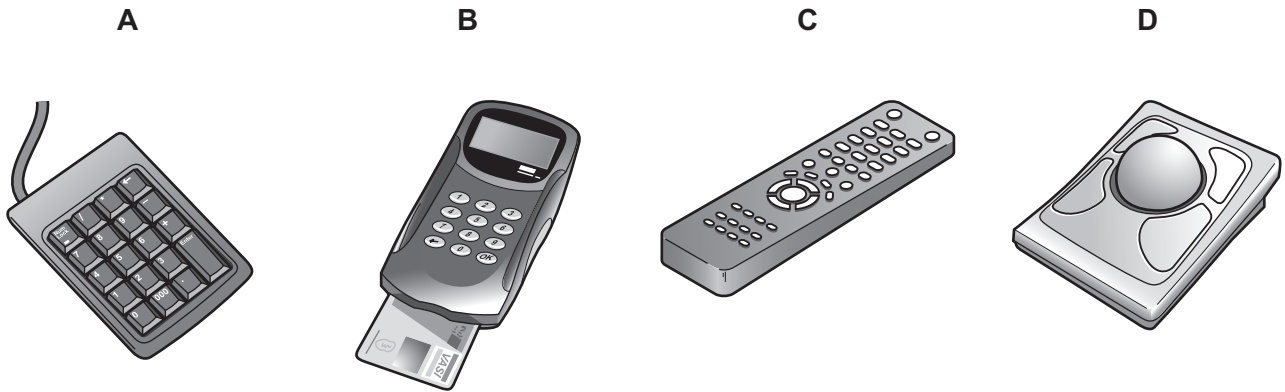
**For Examiner's Use**

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This document consists of **12** printed pages.



1 Name the input devices **A**, **B**, **C** and **D** using the words from the list.



- Bar code reader**
- Chip reader**
- Graphics tablet**
- Laser printer**
- Magnetic Stripe Reader**
- Numeric keypad**
- Remote control**
- Trackerball**

A ..... B .....

C ..... D .....

[4]

2 Ring **two** network devices.

- Bridge**
- DVD R**
- Light pen**
- Magnetic tape**
- Printer**
- Switch**

[2]

3 Tick **True** or **False** next to each of these statements.

	<b>True</b>	<b>False</b>
Withdrawing money from an ATM is an example of batch processing.		
The processing of bank cheques is an example of batch processing.		
Booking a theatre ticket is an example of online processing.		
Producing utility bills is an example of online processing.		

[4]

4 Complete each sentence below using **one** item from the list.

**a bar code**

**a chip**

**a dot matrix printer**

**a DVD RW**

**an inference engine**

**an inkjet printer**

(a) The **most suitable** storage medium for storing data on a bank card is

.....

(b) The tool which searches for matches in a knowledge base is

.....

(c) An optical disc which can have data updated is

.....

(d) Multipart stationery is used with

.....

[4]

5 Draw **five** lines on the diagram to match the input device to its **most appropriate** use.

Input device

Use

**Bar code reader**

**to enter hard copy images into a computer**

**Microphone**

**creating a piece of text**

**Scanner**

**selecting items from a menu**

**Keyboard**

**inputting data from a food item at a POS**

**Mouse**

**creating a voice over for a presentation**

[5]

6 As well as PCs, mobile phones (cellphones) can be used to access the Internet.

(a) Give **two** advantages of using a PC rather than a mobile phone for this purpose.

1 .....

.....

2 .....

..... [2]

(b) Give **two** disadvantages of using a PC rather than a mobile phone for this purpose.

1 .....

.....

2 .....

..... [2]

7 Tick **Internet** or **intranet**, next to each statement, as appropriate.

	Internet	intranet
is a network of computer networks		
exists usually within one organisation		
anybody can access it		
can be expanded to become an extranet		

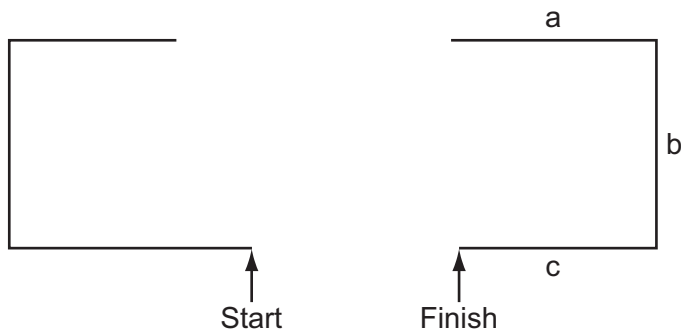
[4]

8 Tick **spam** or **pharming**, next to each statement, as appropriate.

	spam	pharming
is the sending of several emails at once		
requires malicious code to be downloaded		
re-directs the user to a fake website		
is the sending of unsolicited messages		

[4]

9 A student wishes to use a floor turtle to draw this shape:



Name and explain the meaning of **four** instructions that the turtle graphics software would contain in order to draw the shape. Note: a, b and c are the same length.

Instruction 1 .....

Meaning .....

Instruction 2 .....

Meaning .....

Instruction 3 .....

Meaning .....

Instruction 4 .....

Meaning .....

[8]

10 Tick whether the following statements are **true** or **false** about student records in a database.

	True	False
A file is a collection of related records.		
A field is one item of data such as name or address.		
The same value can occur several times within a key field.		
A record is the complete data about one student.		

[4]

11 Hospitals often use computers to continuously monitor patients.

(a) Describe the monitoring process.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
..... [4]

(b) Give **four** advantages of using a computer rather than nurses to monitor patients.

1 .....  
.....  
2 .....  
.....  
3 .....  
.....  
4 .....  
..... [4]

12 A shop owner uses a spreadsheet to calculate his profits. This is part of the spreadsheet.

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	A	B	C	D	E	F	G
1	<b>Producer</b>	<b>Food type</b>	<b>Number in stock</b>	<b>Cost Price</b>	<b>Selling Price</b>	<b>Profit</b>	<b>Total profit</b>
2	Logekks	Potato flakes	168	\$1.80	\$1.90	\$0.10	\$16.80
3	Squarebranch	Chocolate bar	202	\$0.75	\$0.80	\$0.05	\$10.10
4	Roofs	Beefburgers	88	\$2.05	\$2.25	\$0.20	\$17.60
5	Kapats	Gravy	120	\$3.20	\$3.45	\$0.25	\$30.00
6	Startle	Yoghurt cream	122	\$1.50	\$1.65	\$0.15	\$18.30
7							
8		<b>Total in stock</b>	700		<b>Overall profit</b>		\$92.80

(a) Give the cell reference of the cell that contains \$3.45.

..... [1]

(b) Give the cell reference of a cell that contains a label.

..... [1]

(c) How many columns are shown in the spreadsheet?

..... [1]

(d) Write down the formula which should go in cell G2.

= ..... [1]

(e) Formulae similar to that used in cell F2, that is to say = E2 – D2, have been used in cells F3 to F6. These were not typed.

Describe how these were entered.

.....  
 .....  
 .....  
 ..... [2]

(f) Spreadsheets can be used for modelling.

Give **three** reasons why computer models are used rather than the real thing.

1 .....

.....

2 .....

.....

3 .....

..... [3]

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13 Describe the differences between a **CLI** (Command Line Interface) and a **GUI** (Graphical User Interface).

.....

.....

.....

.....

.....

.....

.....

.....

..... [4]





15 Floyd has purchased a laptop computer. He wants to use it for Internet banking.

(a) Explain why Floyd would need the following two items.

Browser .....

.....

ISP .....

..... [2]

(b) Discuss the advantages and disadvantages to customers of using Internet banking rather than visiting the bank.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [6]

16 Describe what is meant by a Wiki.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
..... [4]

17 There are a number of health and safety risks associated with using computers.

For the **three** safety risks given below, describe a way in which each can be minimised.

Electrocution .....

.....

Fire .....

.....

Tripping .....

..... [3]

18 There are many microprocessor-controlled devices in the modern home.

Describe **five** effects of these devices on people's lifestyles.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

..... [5]

19 Describe encryption and discuss the benefits and drawbacks of using it to make data secure.

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..... [5]

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