OCR
Oxford Cambridge and RSA

Monday 14 May 2018 – Morning

GCSE INFORMATION AND COMMUNICATION TECHNOLOGY

B061/02   ICT in Today's World

Candidates answer on the Question Paper.

OCR supplied materials:
None

Other materials required:
None

Duration: 1 hour

Candidate forename		Candidate surname	

Centre number						Candidate number					

INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Do **not** write in the barcodes.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets **[ ]** at the end of each question or part question.
- The total number of marks for this paper is **60**.
- Quality of written communication is assessed in questions marked with an asterisk (*).
- This document consists of **12** pages. Any blank pages are indicated.

OCR is an exempt Charity

Turn over

2

Answer **all** the questions.

1   A smart television system is shown in **Fig. 1**. The television system is connected to the internet.

status LED

screen

wireless
keyboard

cable to
internet
connection

remote
control

power switch

speakers
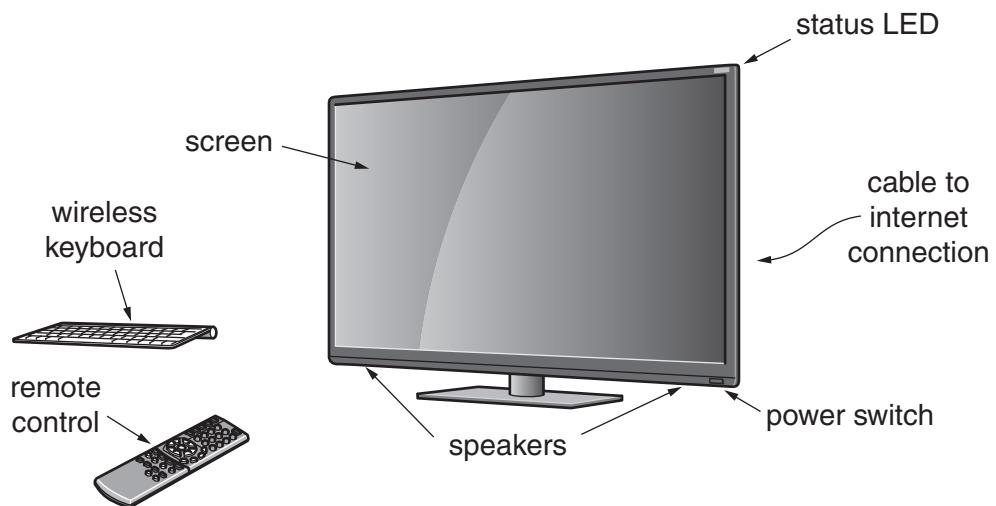
Fig. 1

(a) Identify **one** input device that is included in the television system shown in **Fig. 1** and state what it would be used for.

Input device ....

Use ....

....
[2]

(b) Identify **one** output device that is included in the television system shown in **Fig. 1** and state what it would be used for.

Output device ....

Use ....

....
[2]

(c) Describe **two** ways that programme content can be accessed over the internet for the viewer to watch on the smart TV.

1 ....

....

....

....

2 ....

....

....

....

[4]

Turn over

4

2   A private office is protected by a computerised security system. The system will allow authorised people to enter the office and will alert people when an unauthorised person has gained entry to the office.

(a) Identify **three** methods of quickly inputting data into the system when entering the office and give **one** benefit, other than speed, of each method.

The benefits you give **must** be different.

Method 1 ....

....

Benefit 1 ....

....

Method 2 ....

....

Benefit 2 ....

....

Method 3 ....

....

Benefit 3 ....

....

[6]

(b) Describe **three** ways the system could alert others to the presence of an unauthorised person in the office.

1 ....

....

....

....

2 ....

....

....

....

3 ....

....

....

....

[6]

6

3   Complete the table below to identify the most appropriate hardware device that would be used with a laptop computer for each of the given tasks.

[5]

Task	Appropriate hardware device
Adding files to an optical disk	
Producing a hardcopy of a document	
Selecting an option from an on-screen menu	
Storing the operating system of the laptop	
Inputting an exact copy of a printed photograph	

4   Computer systems include backing storage and main memory.

Explain the **difference** between backing storage and main memory.

....

....

....

....

....

....

....

.... **[4]**

*5 Explain why young people's use of the internet should be carefully monitored.

Marks will be awarded for the quality of written communication in your answer.

....

....

....

....

....

....

....

....

....

....

....

....

....

....

.... **[8]**

Turn over

6   The spreadsheet in **Fig. 2** is used to model the profit and loss of the sale of party items. A company has a target of making a profit of more than £10 for the sale of these items.

	A	B	C	D	E
1	**Profit/Loss**				
2	**Item**	**Price paid per box**		**Selling price per box**	**Profit/Loss**
3	Candles	£3.50		£5.00	£1.50
4	Matches	£1.20		£1.15	−£0.05
5	Plastic knives	£1.50		£1.30	−£0.20
6	Plastic forks	£1.75		£1.30	−£0.45
7	Plastic spoons	£1.60		£1.30	−£0.30
8	Paper plates	£4.00		£5.00	£1.00
9	Paper napkins	£1.09		£2.25	£1.16
10					
11				Profit/Loss	£2.66
12					
13				Target	
14					
15					
16					

Fig. 2

(a) The selling price of plastic forks is increased to £1.95.

   (i) Give the cell reference of the cell that **must** be changed.

   .... **[1]**

   (ii) Give the cell references of the **two** cells that will automatically change when the price of plastic forks is increased.

   1 ....

   2 ....

   [2]

(b) This formula will be placed in cell E13 to show whether or not the target of more than £10 is met:

$$\underbrace{\text{=IF(}}_{\text{A}}\underbrace{\text{E11>10,}}_{\text{B}}\underbrace{\text{"Profit Target Met","Profit Target NOT Met")}}_{\text{C}}$$

Describe what each of the labelled parts of the formula does.

A ....

....

....

....

B ....

....

....

....

C ....

....

....

....

[6]

*7 Explain how ICT allows people to continue to work when they are away from their main office.

Marks will be awarded for the quality of written communication in your answer.

....

....

....

....

....

....

....

....

....

....

....

....

....

....

.... **[8]**

8   Describe how an expert system is used to assist a mechanic in diagnosing a fault in a car engine.

....

....

....

....

....

....

....

....

....

....

....

.... **[6]**

END OF QUESTION PAPER

PLEASE DO NOT WRITE ON THIS PAGE