

**Input and output devices – 2023 ICT IGCSE 0417**

1. **March/2023/Paper\_0417/12/No.2**

Tick ( ✓ ) the device which produces hard copy.

- A Buzzer
- B Laser printer
- C Touch screen
- D Webcam

[1]

2. **March/2023/Paper\_0417/12/No.6**

Bluetooth is a method of wireless communication.

State **two** devices found in the home which could be connected via Bluetooth.

- 1 .....
- 2 .....

[2]

3. **March/2023/Paper\_0417/12/No.10**

Some computers have touch screens.

Describe **three** benefits of using a touch screen.

- 1 .....
- 2 .....
- 3 .....

[3]

4. March/2023/Paper\_0417/12/No.16(a)

A school car park is controlled by a barrier. When teachers enter the car park their number plate is read and the barrier is raised automatically.

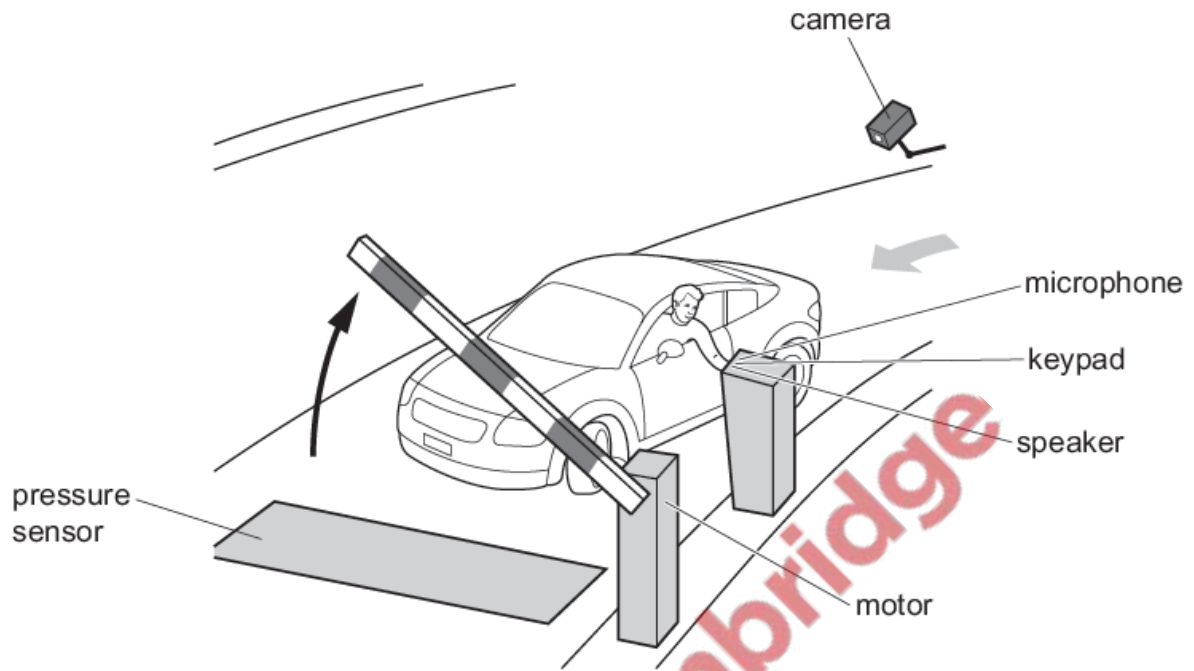


Fig. 16.1

- (a) Visitors can use the keypad as an input device to enter a code which allows the barrier to be raised.

Identify **three** other input devices shown in Fig. 16.1.

- 1 .....
- 2 .....
- 3 .....

[3]

5. June/2023/Paper\_0417/11/No.8

(a) Compare Optical Mark Readers (OMRs) with Optical Character Readers (OCRs). Your answer must include similarities and differences.

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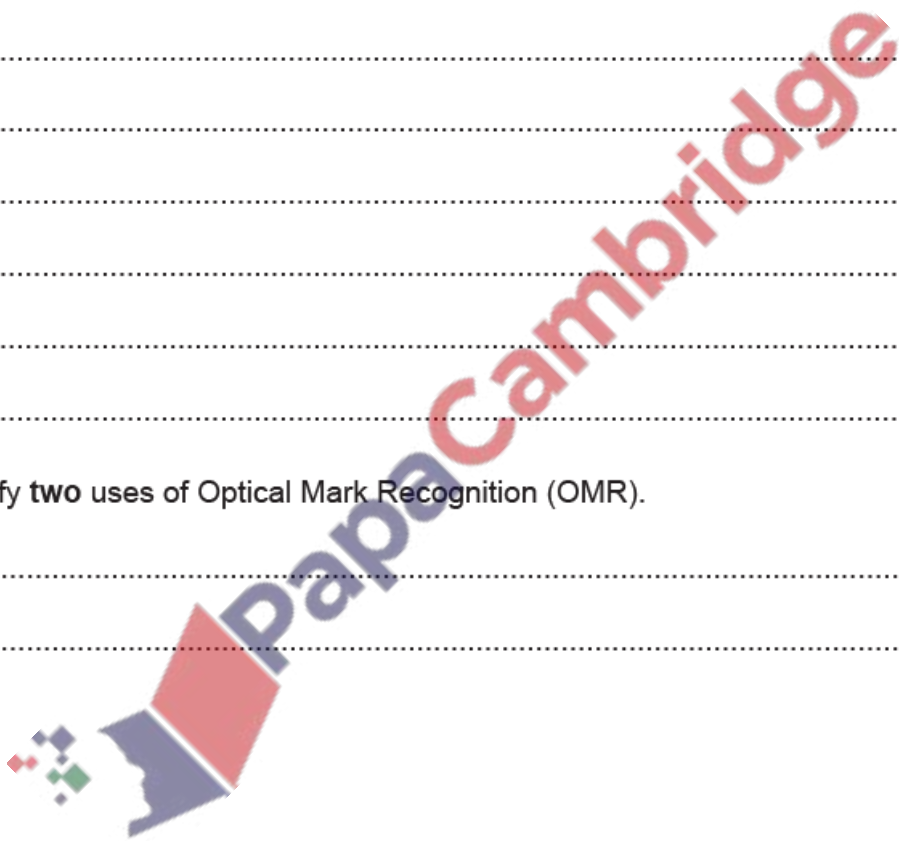
[6]

(b) Identify two uses of Optical Mark Recognition (OMR).

1 .....

2 .....

[2]



6. June/2023/Paper\_0417/11/No.11

Portable hard drives can be Solid State Drives (SSDs) or Hard Disk Drives (HDDs).

Explain why the SSD may be better to use than the HDD.

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[4]

7. June/2023/Paper\_0417/12/No.2

Identify the most appropriate hardware from the descriptions given:

(a) non-volatile internal memory used to store the start-up instructions

..... [1]

(b) an internal component that provides the input and output of audio signals

..... [1]

(c) an internal component that is composed of the main memory, the control unit and the arithmetic logic unit.

..... [1]

8. June/2023/Paper\_0417/12/No.3

A headteacher is producing a web page about the history of her school. She has been given some old hard-copy photographs which she will include on the web page. She has a digital camera and a scanner to use to convert the hard-copy photographs into a digital format.

Compare the use of a digital camera with a scanner in this scenario. Your answer must include similarities and differences.

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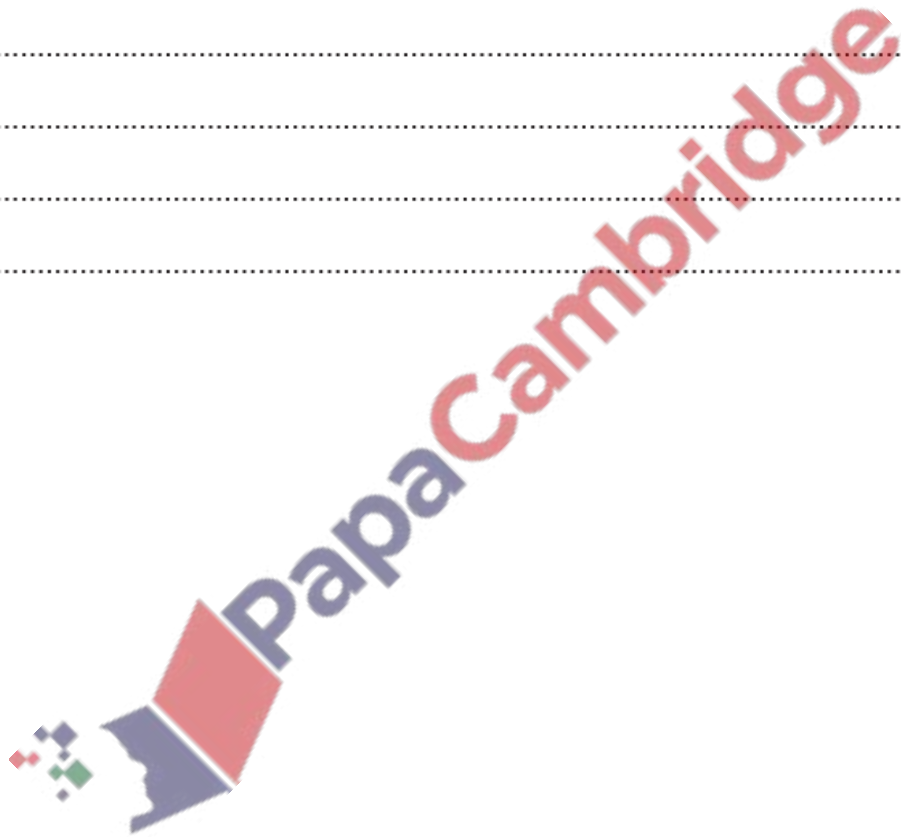
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[4]





10. June/2023/Paper\_0417/12/No.13(b, c)

Weather forecasters use computer modelling.

- (b) Data is collected by different types of sensor and then input to the computer model to be processed.

Identify **two** sensors that could be used to collect weather data.

1 .....

2 .....

[2]

- (c) The processed data is then output.

Identify **two** output devices that could be used.

1 .....

2 .....

[2]

11. June/2023/Paper\_0417/13/No.2(b, c)

Identify the most appropriate hardware from the descriptions given.

- (b) An external device that retains a computer's data even after the computer is turned off.

..... [1]

- (c) An input device that is attached to a monitor.

..... [1]

12. June/2023/Paper\_0417/13/No.3

A group of students are producing a class newsletter which they will email to parents of students in the class. They are deciding whether to use a laptop computer or a smartphone to type the newsletter.

- (a) Discuss the advantages and disadvantages of using a laptop computer rather than a smartphone for this purpose.

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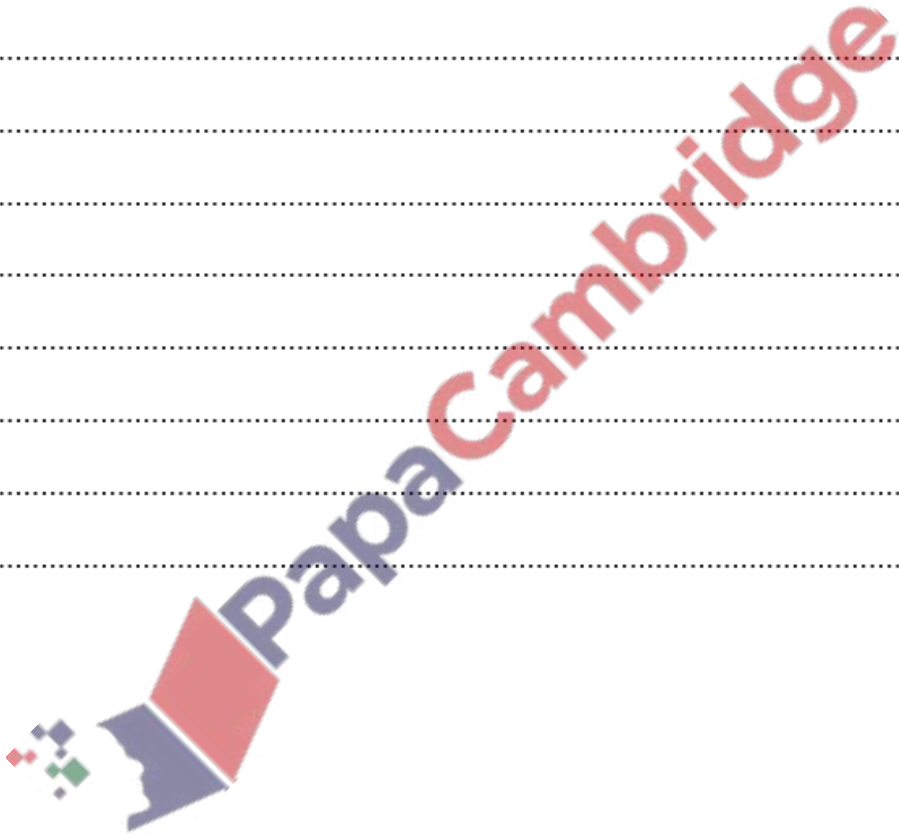
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[6]





(b) The students have decided to use a smartphone. Data for the newsletter will be input, stored and output by the smartphone.

(i) Identify **two** devices that are part of the smartphone that could be used to input the data for the newsletter.

1 .....

2 .....

[2]

(ii) Identify **two** devices that are part of the smartphone that could be used to output data from the newsletter.

1 .....

2 .....

[2]

(iii) Identify **two** appropriate devices that could be used to store data for the newsletter.

1 .....

2 .....

[2]

(c) The newsletter is to be saved as a PDF and sent as an email attachment to parents.

Describe **two** benefits of saving the newsletter as a PDF.

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2 .....

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[2]

(d) Describe the features that the students must include to make the newsletter appeal to the parents.

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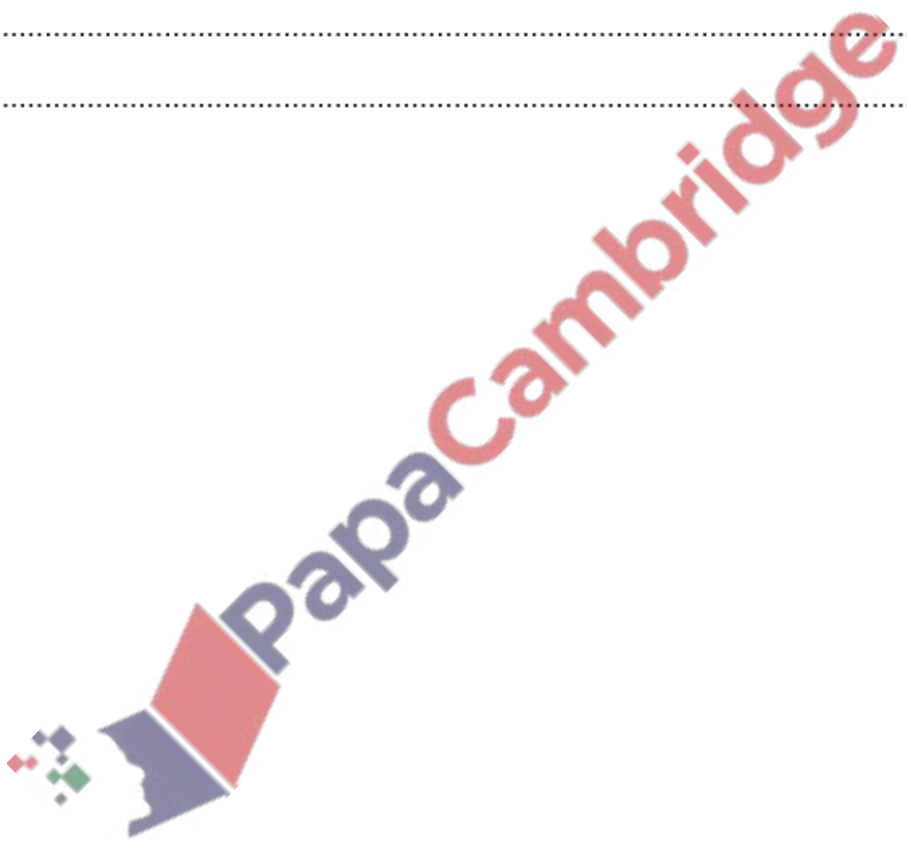
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[4]



State the most appropriate word or phrase to complete each sentence.

(a) The type of data output from a sensor is

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(b) The type of data read by a microprocessor is

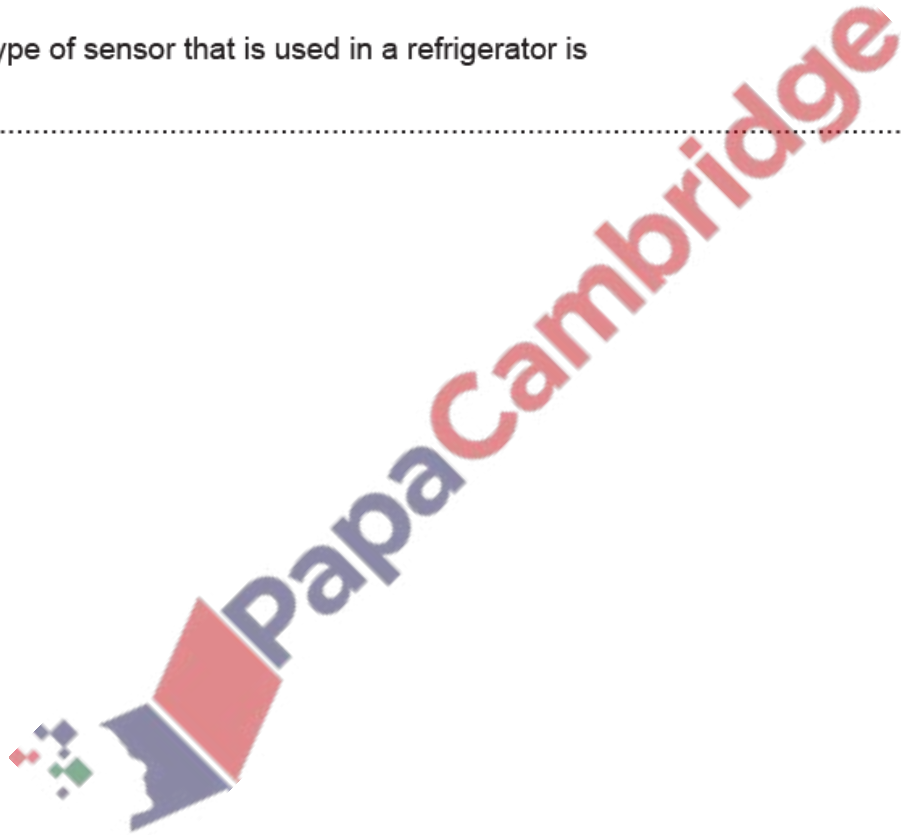
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(c) The item of hardware that converts data from a sensor so a microprocessor can read it is

..... [1]

(d) The type of sensor that is used in a refrigerator is

..... [1]



14. Nov/2023/Paper\_0417/11/No.3

A group of students are carrying out a study of the quality of river water for a project. They can either use a tablet computer or a smartphone to monitor and record their findings.

(a) Discuss the advantages and disadvantages of using a tablet computer rather than a smartphone for this project.

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[6]

(b) Identify two devices that could be used by the students to enter data.

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2 .....

[2]

15. Nov/2023/Paper\_0417/11/No.4

A headteacher is considering setting up a card system for students to buy food in the school canteen.

The headteacher is trying to decide whether to install a system that uses magnetic stripe card readers or one that uses chip and PIN card readers.

Compare the use of magnetic stripe card readers with the use of chip and PIN card readers. Your answer must include similarities and differences.

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[6]

16. Nov/2023/Paper\_0417/12/No.1

Tick (✓) **one** external device.

- A sound card
- B pen drive
- C motherboard
- D ROM

[1]

A teacher is setting up a school shop. The teacher is setting up a spreadsheet to keep the accounts of the shop.

(b) Each box delivered to the school shop includes a QR code.

Explain why QR codes are used.

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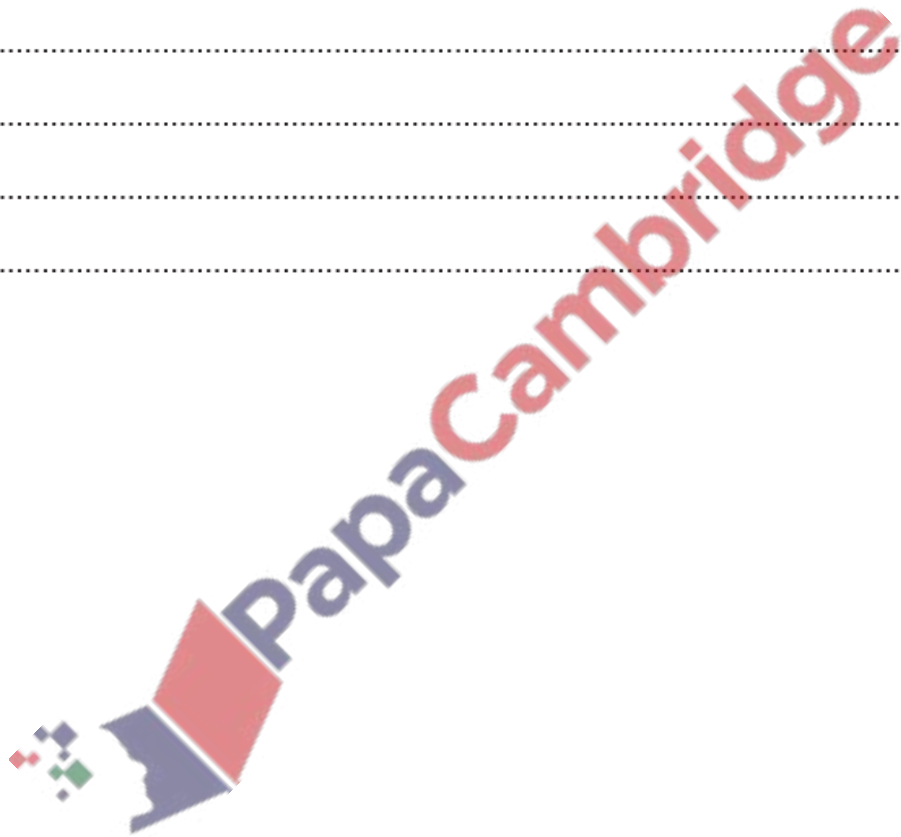
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[4]



18. Nov/2023/Paper\_0417/13/No.7(b)

Rockit Aircraft manufactures and flies aeroplanes.

(b) Some of the components used in the manufacture of aircraft are produced using a 3D printer.

Analyse the use of a 3D printer to make the components rather than making the components by hand.

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[6]

19. Nov/2023/Paper\_0417/13/No.8(a, b)

Many devices in the home can be connected to the internet so they can be controlled remotely. These devices are called smart devices. A house contains a smart security system.

(a) Describe the benefits and drawbacks of using a smart security system.

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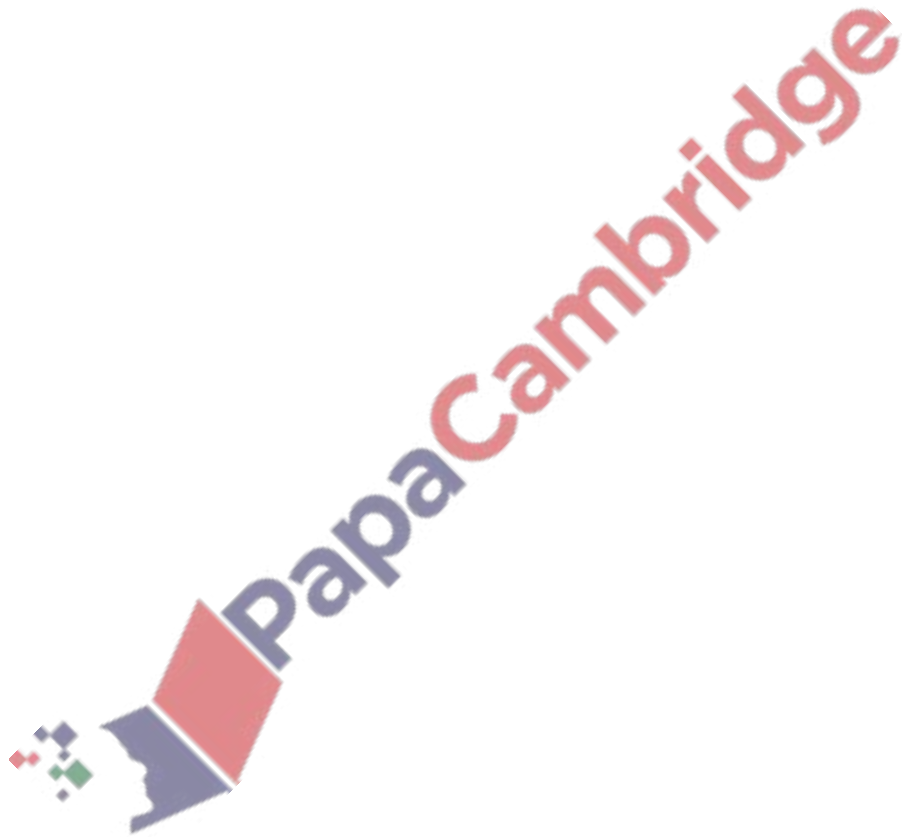
[4]

(b) Identify two sensors that could be used with the smart security system.

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[2]





More people use desktop computers rather than tablet computers when working at home.

- (a) Discuss the advantages and disadvantages of using desktop computers rather than tablet computers for doing work at home.

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[6]

- (b) Desktop computers use input and output devices.

- (i) State two input devices that can be used in a desktop computer for working at home.

1 .....  
2 .....

[2]

- (ii) State two output devices that can be used in a desktop computer for working at home.

1 .....  
2 .....

[2]