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Centre Number						Candidate Number				
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**OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GENERAL CERTIFICATE OF SECONDARY EDUCATION**

2357/01

**INFORMATION AND COMMUNICATION
TECHNOLOGY**

Paper 1 (Foundation Tier)

MONDAY 11 JANUARY 2010: Afternoon

DURATION: 1 hour

SUITABLE FOR VISUALLY IMPAIRED CANDIDATES

Candidates answer on the Question Paper

OCR SUPPLIED MATERIALS:

None

OTHER MATERIALS REQUIRED:

None

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS TO CANDIDATES

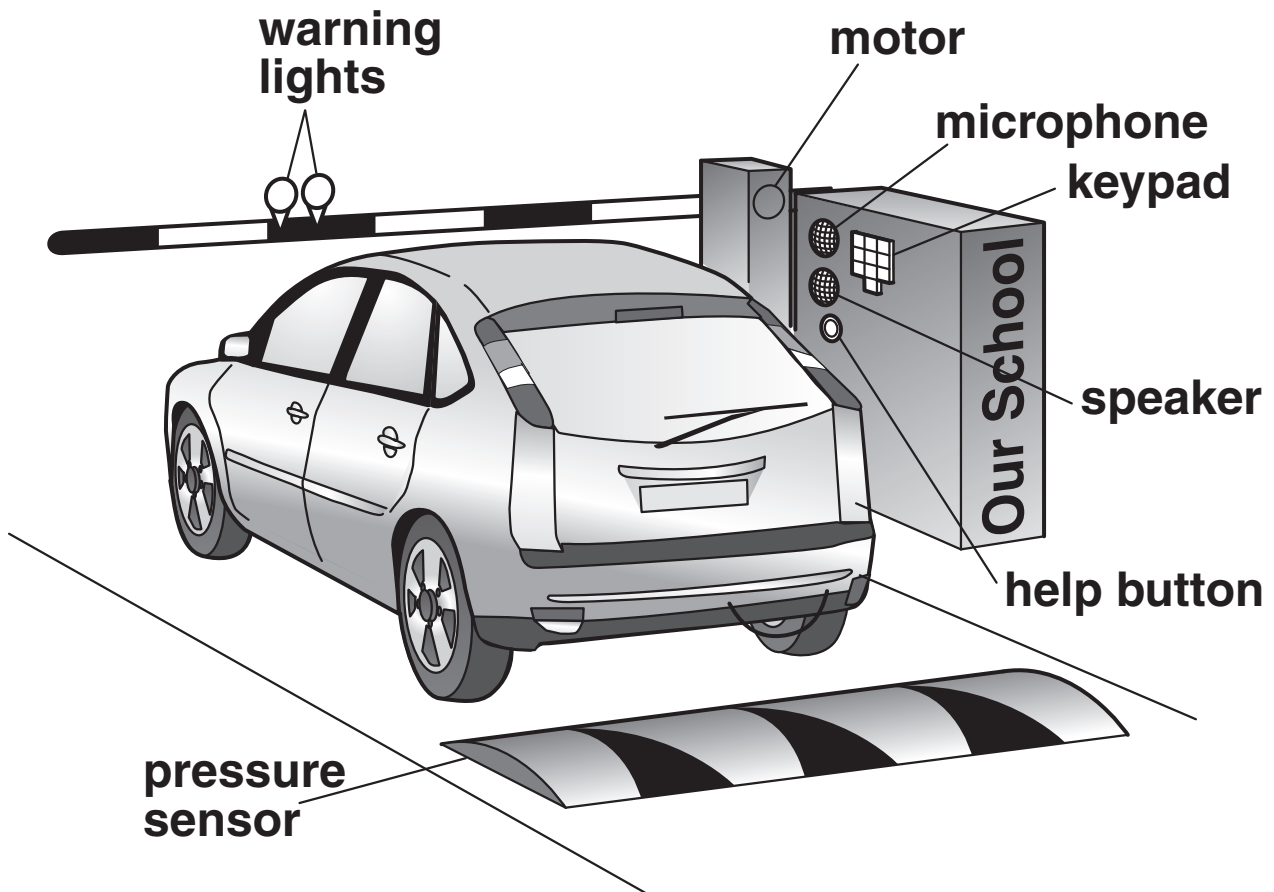
- **Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes on the first page.**
- **Use black ink. Pencil may be used for graphs and diagrams only.**
- **Read each question carefully and make sure that you know what you have to do before starting your answer.**
- **Answer ALL the questions.**
- **Write your answer to each question in the space provided.**

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

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- 1 The entrance to a school is controlled by a barrier. The barrier is mounted on a control box. A keypad, a help button, a microphone and a loudspeaker are fixed to the control box. A motor is mounted on the control box at the fixed end of the barrier arm. Warning lights are fixed to the centre of the barrier arm. There is a pressure sensor fixed to the road a few yards before the barrier.



Visitors must use the keypad or press the Help button to ask for the barrier to be raised.

Tick ONE box in each row to show whether each item is input or output. The first one has been done for you.

ITEM	INPUT (✓)	OUTPUT (✓)
help button	✓	
keypad		
microphone		
motor		
pressure sensor		
speaker		
warning lights		

[6]

2 Tick TWO uses for a mouse.

USE	TICK (✓)
Choosing from an on-screen menu	
Moving a pointer on a screen	
Reading numbers from a bank cheque	
Sending output to a printer	
Storing data	

[2]

3 Tick ONE box in each row to show whether the statement is True or False.

STATEMENT	TRUE (✓)	FALSE (✓)
A modem is needed when using dial-up internet access		
All information on the internet is accurate		
Having your own user ID stops others from seeing your files		
Using a wrist rest when typing will help prevent RSI		

[4]

- 4 Daphne is using her computer on the internet and sends an email to Trevor. The table below shows the 7 stages involved. These stages are in the wrong order.

Complete the table below to put the stages into the correct order. Two are done for you.

STAGE	ORDER
The email is sent to Trevor's computer	
The message is sent from Daphne's computer to her Internet Service Provider (ISP)	
DAPHNE TYPES THE MESSAGE	1
TREVOR READS THE EMAIL	7
Daphne's ISP sends her message to Trevor's ISP	
Trevor logs onto his email	
Daphne enters Trevor's email address	

[4]

5 The following are all used for storing data:

- A CD-ROM**
- B USB flash memory stick**
- C hard disk**
- D magnetic tape**
- E internal memory**

For each of the sentences below, choose the most appropriate form of storage from the above list and write its letter in the sentence below:

_____ is used for storing backups of network computers.

_____ is used to store a computer operating system when the computer is switched off.

_____ is used to quickly move files between computers.

_____ is used as a read-only medium for selling computer games.

_____ is used to store the data currently in use by a computer system.

[5]

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- 6 A teacher has written down some of the rules for a school computer room.

COMPUTER ROOM RULES

RULE 1

Tampering with any of the wires attached to a computer is forbidden.

RULE 2

All coats and bags must be stored at the front of the room.

RULE 3

You must not use your own floppy disks or USB flash memory sticks in these computers.

RULE 4

You are not allowed to use these computers to access emails from outside the school.

RULE 5

You are not allowed to use another person's user ID and password to log onto a computer.

RULE 6

You are not allowed to eat or drink in this room.

- (a) For each of rules 1 to 5, give ONE reason why it should be obeyed by users of the computers in the room. Your reason must be different for each rule.

Rule 1 _____

Rule 2 _____

Rule 3 _____

Rule 4 _____

Rule 5 _____

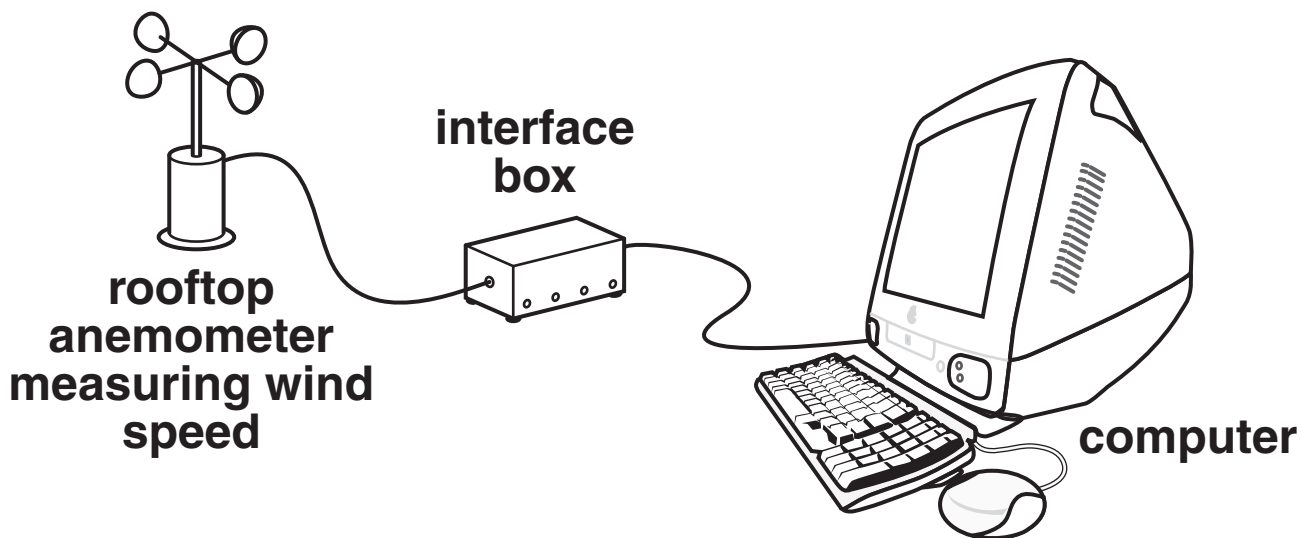
_____ [5]

- (b) Rule 6 is to try and prevent the room becoming untidy and dirty.

Give ONE other reason for this rule.

_____ [1]

- 7 At 12 o'clock each day, a computer system records the wind speed measured by a rooftop anemometer.



- (a) Give ONE advantage of using a computer system in this way rather than collecting the data manually.

[1]

- (b) The anemometer has to be connected to an interface box rather than directly to the computer.

Why is this necessary?

[2]

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TURN OVER FOR NEXT QUESTION

The results of one week's monitoring are imported into this spreadsheet.

	A	B
1	DAY OF THE WEEK	WIND SPEED (KM/H)
2	Monday	16.4
3	Tuesday	18.3
4	Wednesday	12.1
5	Thursday	13.2
6	Friday	15.4
7	Saturday	14.7
8	Sunday	15.9
9		
10	Average (Km/h)	
11		
12		

(c) Give the cell reference of the cell that holds the wind speed for Tuesday.

_____ [1]

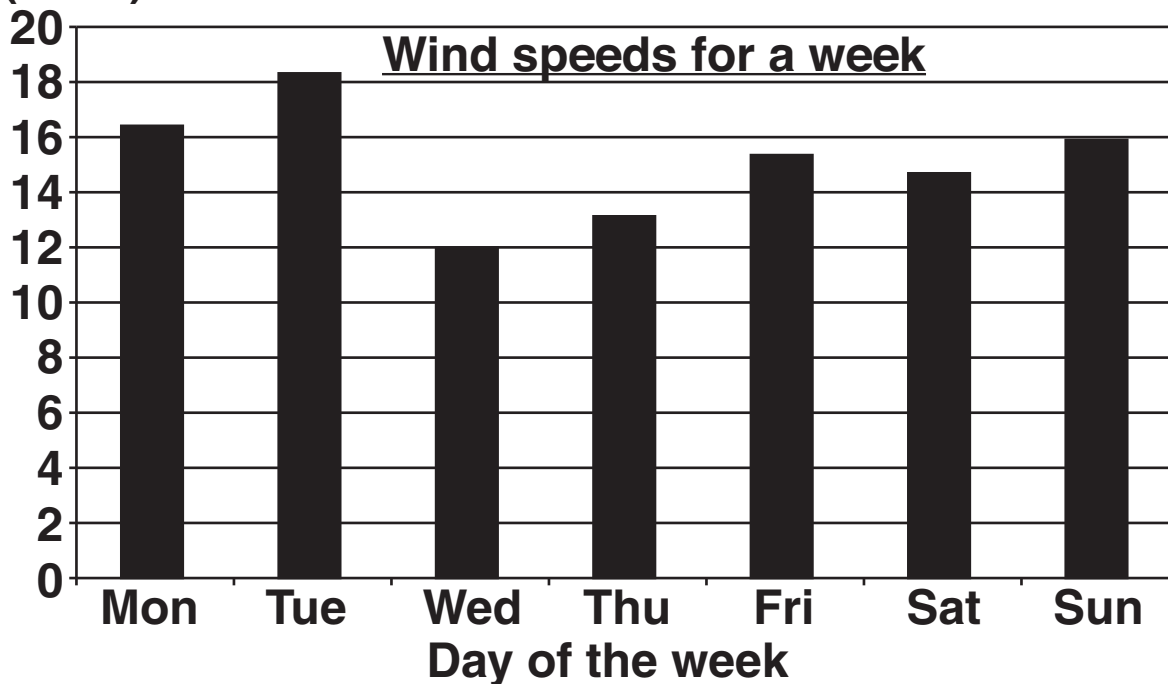
(d) Cell B10 uses a formula to calculate the average wind speed for the week.

Give the most suitable formula for B10.

_____ [2]

The following chart has been made from the data in the spreadsheet.

Wind speed
(km/h)



(e) Describe how spreadsheet software could have been used to make this chart from the data.

[4]

The chart is added to the school website's geography web page.

- (f) Give ONE way that this chart could have been added to the web page.

_____ [1]

- (g) Give TWO ways that a viewer could go to the geography page.

Way 1 _____

Way 2 _____

_____ [2]

8 Rinzen uses her laptop rather than her desktop computer for her school work.

(a) Give ONE advantage of using her laptop.

_____ [1]

(b) Give TWO disadvantages of using her laptop.

Disadvantage 1 _____

Disadvantage 2 _____

_____ [2]

9 Graham is creating a slide show presentation of photographs of his family.

Give ONE hardware device Graham could use to import a photograph into his computer and how he could use it.

Device _____

How the image could be imported into his computer.

[4]

10 Email messages are cheaper to send and can arrive at the recipient quicker than ordinary post.

(a) State FOUR other advantages of using email.

Advantage 1 _____

Advantage 2 _____

Advantage 3 _____

Advantage 4 _____

_____ **[4]**

(b) State ONE disadvantage of using email.

_____ **[1]**

11 Many young people use chat rooms on the internet.

Give FOUR precautions that young people should take when using a chat room.

Precaution 1 _____

Precaution 2 _____

Precaution 3 _____

Precaution 4 _____

_____ [4]

12 Tracey wants to use the internet to find information about mobile phones that have cameras and can play music files.

Explain how Tracey could use a search engine on the internet to find this information.

[4]

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