

Candidate forename		Candidate surname	
-----------------------	--	----------------------	--

Centre number						Candidate number				
------------------	--	--	--	--	--	---------------------	--	--	--	--

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GENERAL CERTIFICATE OF SECONDARY EDUCATION**

2357/02

**INFORMATION AND COMMUNICATION
TECHNOLOGY**

Paper 1 (Higher Tier)

MONDAY 10 JANUARY 2011: Afternoon

DURATION: 1 hour 15 minutes

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, centre number and candidate number in the boxes on the first page. Please write clearly and in capital letters.**
- **Use black ink. Pencil may be used for graphs and diagrams only.**
- **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).**
- **Answer ALL the questions.**

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.**

BLANK PAGE

1 The table below shows instructions used to move a turtle on a grid.

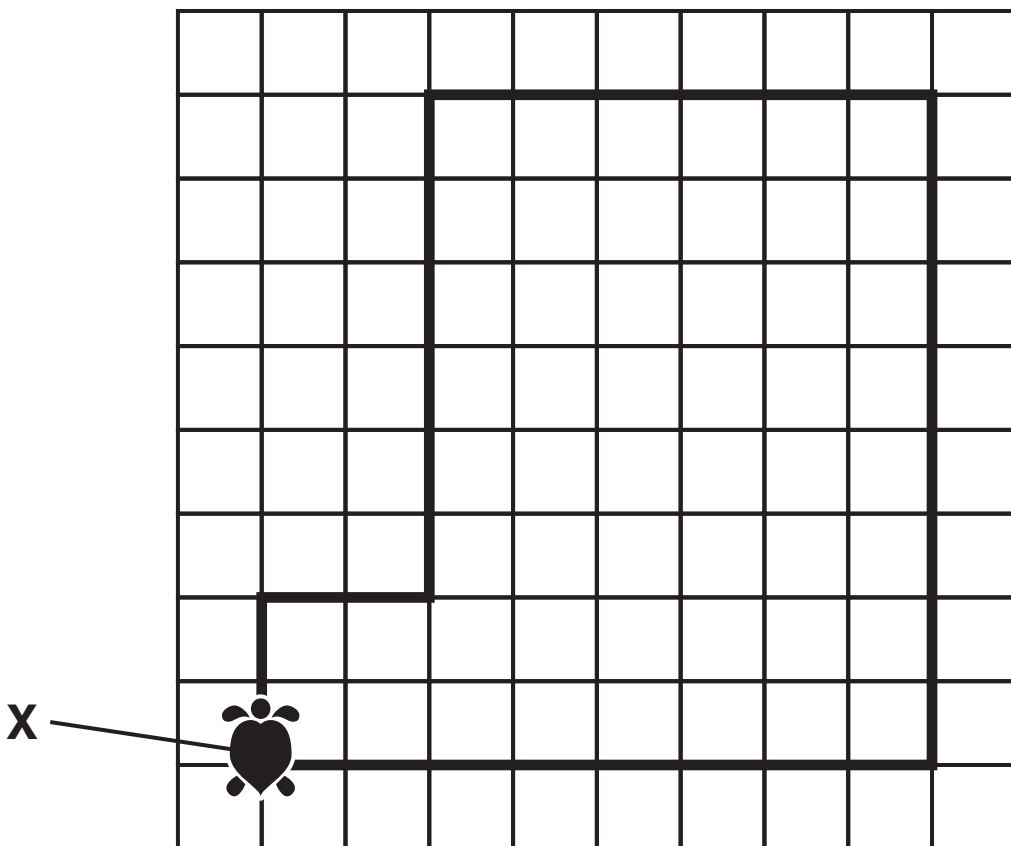
Instruction	Short Instruction	Meaning
REPEAT n []	REPEAT n []	Repeat the instructions in square brackets n times
FORWARD n	FD n	Move n units forwards
BACKWARD n	BK n	Move n units backwards
LEFT n	LT n	Turn left n degrees
RIGHT n	RT n	Turn right n degrees

Using the instructions given in the table, write down the instructions that would be needed to make the turtle start at X and move around the shape shown in Figure 1 on the next page and end up back as it started.

Write your answer below, the first instruction has been done for you: [6 marks]

FD 2 _____

Figure 1 Turtle track



2 Identify TWO methods that might be used to input data to set a burglar alarm system and give one benefit of each method. [4 marks]

METHOD 1 _____

BENEFIT _____

METHOD 2 _____

BENEFIT _____

3 A home computer network is connected to the internet. Explain how private information on this home computer network can be protected from viewing by unauthorised persons. [6 marks]

4 A geography student wants to record some measurements of the weather at school using sensors. She wants to use a computer system to collect the data from the sensors at the same time each day.

(a) Describe how she would set up the computer system and sensors to collect her measurements.

You may, if you wish, use the space facing the lines to draw a clear, labelled diagram to help you when answering this question. [6 marks]

- (b) (i) Give TWO advantages of using a computer system to collect the weather data from the sensors rather than collecting it manually. [2 marks]**

ADVANTAGE 1 _____

ADVANTAGE 2 _____

- (ii) Give TWO disadvantages of using a computer system to collect the data about the weather from the sensors rather than collecting it manually. [2 marks]**

DISADVANTAGE 1 _____

DISADVANTAGE 2 _____

(c) Describe how computer software could be used to analyse the collected data ready for use in a slideshow presentation. [4 marks]

5 A company uses a website to enable it to sell its goods online. The website shows images and descriptions of goods for sale.

(a) Describe THREE other features of the website that enable customers to buy the goods. [6 marks]

(b) Discuss the advantages and disadvantages to customers of buying the goods online. [6 marks]

6 Daphne’s car rental company uses a database to store details of its vehicles.

(a) The company has purchased a new fleet of cars. Daphne walks around the parking area and manually collects data about the new vehicles so that she can enter the data into the database. Describe how she would manually collect the data about the vehicles so that it is suitable for entry into the database. [4 marks]

(b) Identify TWO methods that are used to check the data being entered into the database. [2 marks]

1 _____

2 _____

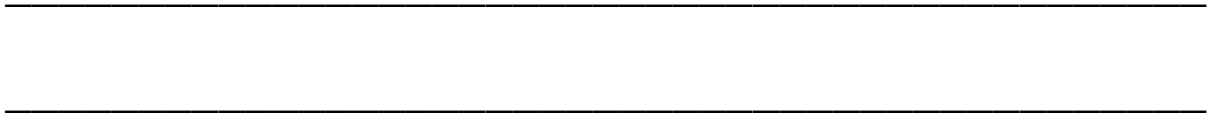
(c) Describe TWO features of database software that might be used to assist customers in choosing a suitable car to rent. [4 marks]

FEATURE 1 _____

FEATURE 2 _____

7 “ICT causes more health problems than it helps to overcome.”

Discuss this statement. [8 marks]



BLANK PAGE

BLANK PAGE



Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact the Copyright Team, First Floor, 9 Hills Road, Cambridge CB2 1GE.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.