Candidate Forename		Candidate Surname	

Centre Number						Candidate Number				

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GENERAL CERTIFICATE OF SECONDARY EDUCATION

2380/02

INFORMATION AND COMMUNICATION TECHNOLOGY

ICT B
(Higher Tier)

TUESDAY 19 JANUARY 2010: Morning
DURATION: 1 hour 30 minutes

SUITABLE FOR VISUALLY IMPAIRED CANDIDATES

Candidates answer on the Question Paper

OCR SUPPLIED MATERIALS:

Insert 2380/1/&2/PRE (inserted)

OTHER MATERIALS REQUIRED:

Flowchart stencil
Candidates pre-prepared materials

READ INSTRUCTIONS OVERLEAF

DC (SLM/SW) MEP10137 23671
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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, however additional paper may be used if necessary.**

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 80.**
- **No marks will be awarded for using brand names of software packages or hardware.**

1 State the type of software that you would recommend for each of the tasks shown in the table below.

You should state the TYPE of software that would perform the task most efficiently.

DO NOT use brand names.

TASK	TYPE OF SOFTWARE
to calculate the cost of customer purchases	
to develop a web blog	
to model numeric data	
to produce a folded health and safety leaflet	
to record and search for customer details	

[5]

2 EnviroMax offers advice to companies about the environmentally friendly manufacture and purchase of computers.

Under each heading give TWO ways a company can help to protect the environment.

Computer manufacture

1 _____

_____

2 _____

_____ **[2]**

Computer purchasing policy

1 _____

_____

2 _____

_____ **[2]**

3 EnviroMax uses a wide range of methods to communicate with other companies.

(a) Two of the benefits of using electronic communication are that it saves cost and time. Explain TWO other benefits to EnviroMax of using electronic communication.

1 _____

_____

_____

_____

2 _____

_____

_____

_____ **[4]**

(b) State TWO ways that electronic communication is better for the environment.

1 _____

_____

2 _____

_____ **[2]**

4 EnviroMax staff travel extensively, sometimes to very remote locations where there are no conventional communication systems.

(a) State THREE methods of accessing emails while travelling on a train. Give one advantage for each method.

Method 1 _____

_____

Advantage _____

_____

Method 2 _____

_____

Advantage _____

_____

Method 3 _____

_____

Advantage _____

_____ **[6]**

(b) State <u>ONE</u> way to connect a laptop to the internet in a very remote location.

_____

_____ **[1]**

5 Describe how a home computer can increase global warming.

_____

_____

_____

_____

_____

_____ **[3]**

6 Staff at EnviroMax have to scan pictures into the computer. When a picture is scanned the scanning software encodes the image, and the result is then stored for future use.

Name <u>TWO</u> formats that can be used to store the encoded image.

1 _____

_____

2 _____

_____ **[2]**

7 EnviroMax software uses a Graphical User Interface (GUI).

State FOUR features of a GUI, giving a benefit of using each feature.

Feature 1 _____

_____

Benefit _____

_____

Feature 2 _____

_____

Benefit _____

_____

Feature 3 _____

_____

Benefit _____

_____

Feature 4 _____

_____

Benefit _____

_____ **[8]**

8 Internet access at home has enabled many people to shop online.

(a) State TWO benefits of shopping online.

1 _____

_____

2 _____

_____ **[2]**

(b) State TWO limitations of shopping online.

1 _____

_____

2 _____

_____ **[2]**

9 EnviroMax provides all new employees with an induction booklet that includes rules for working with ICT equipment and systems at home.

(a) State <u>FOUR DIFFERENT</u> health and safety rules that might be included in the induction booklet.

1 _____

_____

2 _____

_____

3 _____

_____

4 _____

_____ **[4]**

(b) The induction booklet also includes rules to protect the company's data.

State <u>TWO</u> possible rules, and explain how each one could help to protect the data.

Rule 1 _____

_____

How it could help to protect the data

_____

_____

_____

Rule 2 _____

_____

How it could help to protect the data

_____

_____

_____ **[4]**

10 EnviroMax are concerned about the health of their customers accessing their website.

Explain how good website design can help prevent potential health problems for website users.

_____

_____

_____

_____

_____

_____

_____

_____ **[4]**

11 You have been asked to help design a website for EnviroMax. The aim of the website is to raise awareness of ways home users could reduce the environmental impact of their ICT use.

Design the structure for the website. This should show at least five pages, but no more than eight. You must include the links between pages in your design. You DO NOT need to design the pages themselves. You may use a separate sheet of larger paper if you wish, but if you do, be sure to write the question number on it.

[9]

12 EnviroMax provides each member of staff with a personal computer.

The personal computer is supplied with an operating system and peripherals with drivers.

(a) Explain the term operating system.

_____

_____

_____

_____ **[2]**

(b) Explain the term peripheral driver.

_____

_____

_____

_____ **[2]**

(c) Give THREE different methods EnviroMax staff could use to enter data into their computer systems.

1 _____

_____

2 _____

_____

3 _____

_____ **[3]**

(d) Give TWO methods of reducing data entry errors, and state how each method is used.

Method 1 _____

_____

How it is used _____

_____

Method 2 _____

_____

How it is used _____

_____ **[4]**

13 EnviroMax staff work from home.

(a) State ONE benefit and TWO limitations to ENVIROMAX of its employees working from home.

Benefit _____

_____

Limitation 1 _____

_____

Limitation 2 _____

_____ **[3]**

(b) State ONE benefit and ONE limitation to the EMPLOYEE of working from home.

Benefit _____

_____

Limitation _____

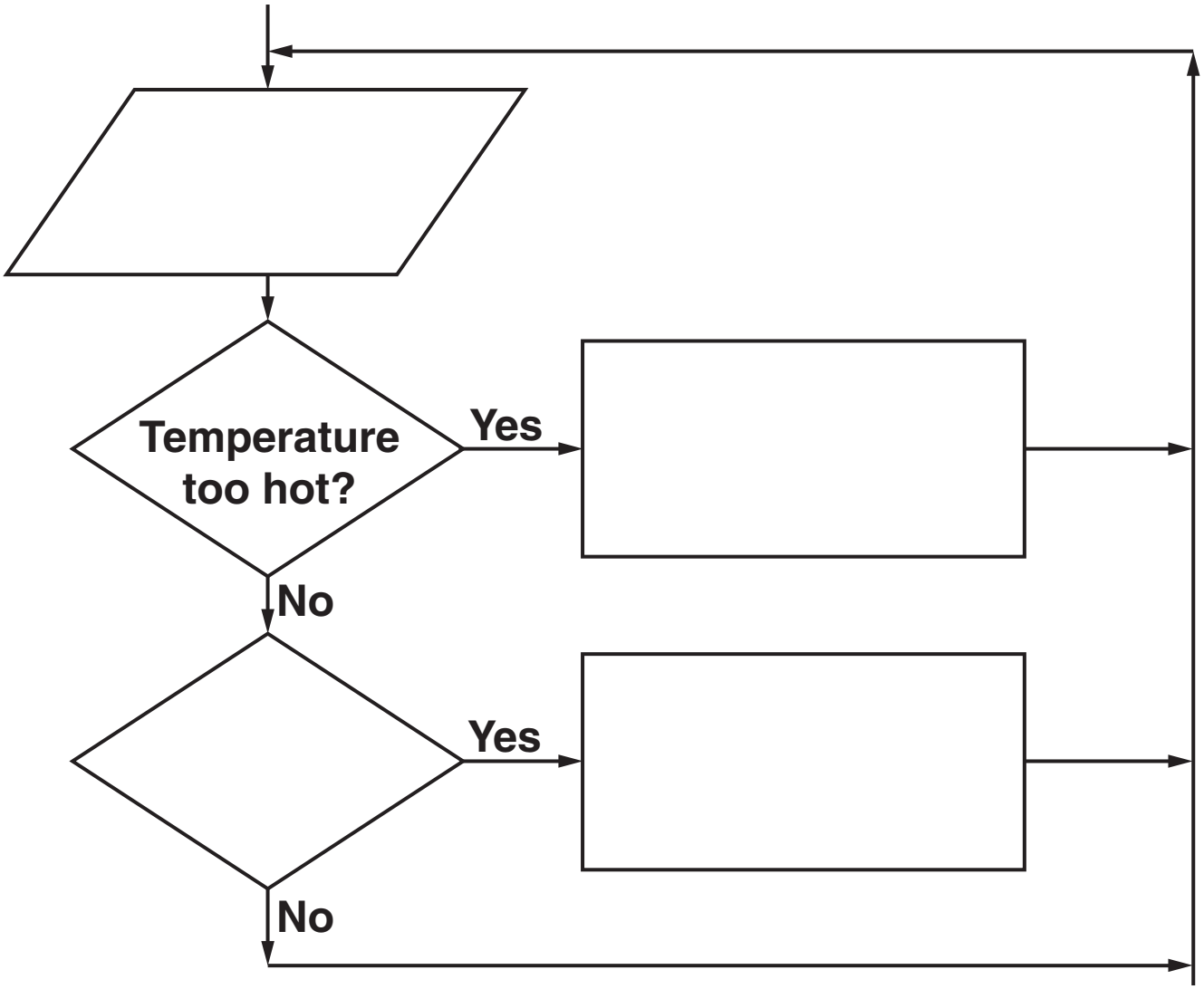
_____ **[2]**

PLEASE TURN OVER FOR THE LAST QUESTION

14 EnviroMax advises companies to use a control system with feedback to maintain a temperature of 21 °C in each room of an office.

The flowchart below needs to show how the system would work.

Write the correct statement for each box in the flowchart.



[4]

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