

**GENERAL CERTIFICATE OF SECONDARY EDUCATION
INFORMATION AND
COMMUNICATION TECHNOLOGY**

2380/01

ICT B
(Foundation Tier)

**Tuesday 19 January 2010
Morning**

Duration: 1 hour

Candidates answer on the Question Paper

OCR Supplied Materials:

- Insert 2380/1/8&2/PRE (inserted)

Other Materials Required:

- Flowchart stencil
- Candidates pre-prepared materials



Candidate Forename		Candidate Surname	
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Centre Number						Candidate Number				
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INSTRUCTIONS TO CANDIDATES

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes above.
- 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.
- Do **not** write in the bar codes.
- 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 **55**.
- No marks will be awarded for using brand names of software packages or hardware.
- This document consists of **12** pages. Any blank pages are indicated.

- 1 Each device in the table below is either an input, output or storage device.

For **each** put a tick in the correct box.

Device	Input	Output	Storage
CD drive			
Digital camera			
Graphics tablet			
Inkjet printer			
Laser printer			
Plotter			
Scanner			
Speakers			

[8]

2 The network at EnviroMax is a LAN.

(a) State **two** advantages and **one disadvantage** of connecting computers together in a LAN rather than using standalone machines.

Advantage 1

.....

Advantage 2

.....

Disadvantage

..... [3]

(b) The other type of network used by companies is a WAN.

Describe the differences between a LAN and a WAN.

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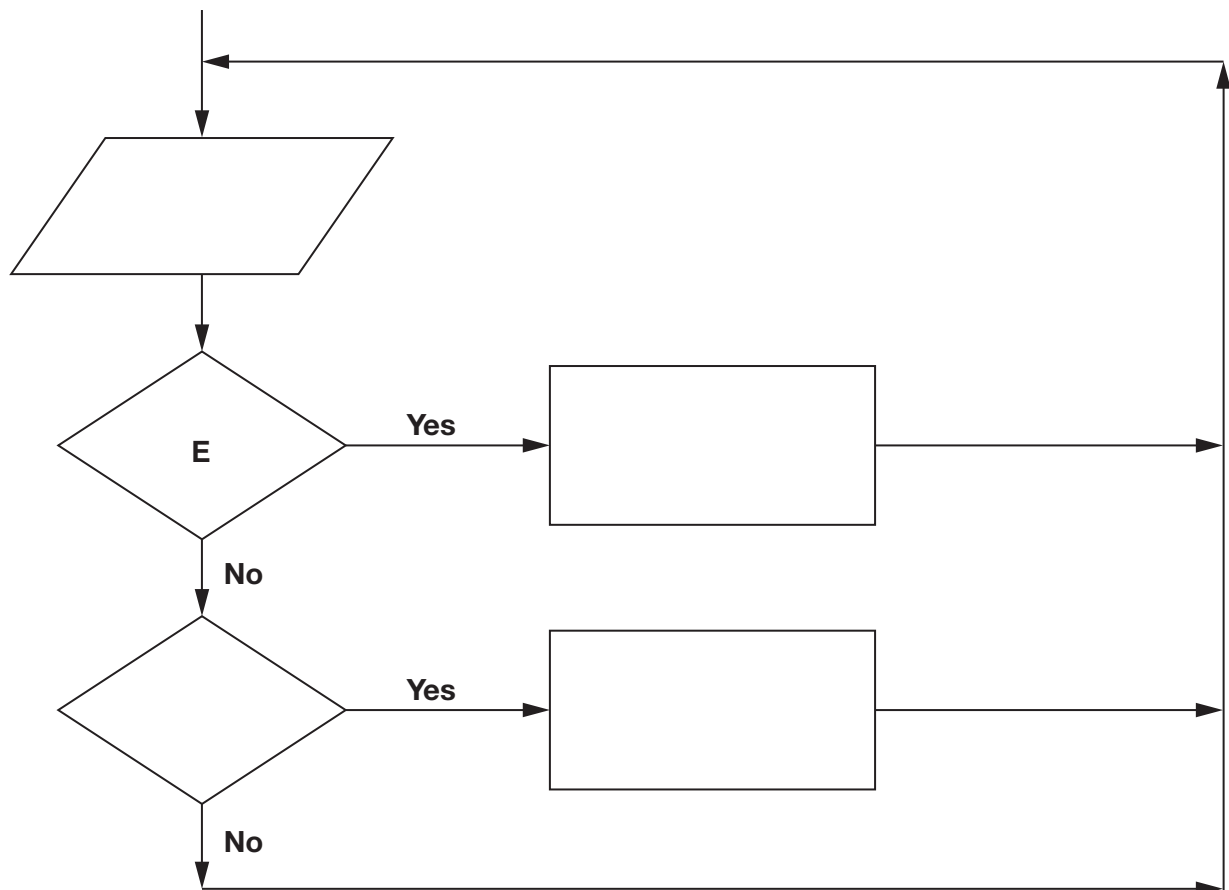
.....

..... [4]

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

(a) The flowchart below needs to show how the system would work. Use the table to identify the statement that should go in each box and label each box with the appropriate letter. You do **not** have to use every statement.

A	Turn off the heater
B	Turn on the heater
C	Disconnect the heating
D	Turn up the thermostat
E	Is the temperature greater than 21 °C?
F	Is the temperature less than 21 °C?
G	Turn down the thermostat
H	Print the temperature of the room
I	Read the temperature



[4]

(b) (i) Identify the device that would be needed to read the temperature in the room.

.....
..... [1]

(ii) Explain why the central heating system needs such a device in each room.

.....
.....
.....
..... [2]

4 EnviroMax uses a wide range of methods to allow companies to communicate with each other.

Explain **three** benefits that these **companies** could gain using electronic communication.

1

.....

.....

2

.....

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3

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..... [6]

- 5 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	
to write a letter to a customer	

[6]

6 EnviroMax needs to comply with the requirements of The Data Protection Act.

Tick **three** statements that are true about the act.

Statement	Tick three boxes only
Personal data must be processed fairly and lawfully.	
Personal data can be passed to other organisations without the consent of the data subject.	
Personal data should be accurate and up to date.	
Data can be used for any purpose.	
Suitable measures must be taken to ensure the safety of personal data.	
Data should be the minimum required for the purpose and can be kept indefinitely.	

[3]

7 Staff at EnviroMax scan images into the computer.

Describe the two file formats shown.

Bit-mapped

.....

.....

.....

.....

Vector

.....

.....

.....

.....

[4]

8 EnviroMax use data validation and verification.

(a) Which **two** of the following is a method of data validation?

	Tick two boxes only
Space check	
Presence check	
Drop down menu	
Range check	

[2]

(b) Draw a line to match the statement to the term.

Verification

checking of data at the time of input – check carried out by the software to make sure the data is reasonable.

Validation

collection of data over a period of time, followed later by processing.

Batch processing

checking that data entered into a computer system is accurate.

[3]

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

Design the structure of the website showing links between a minimum of four and maximum of eight pages. You **do not** need to design the pages themselves.

[9]

10
BLANK PAGE

PLEASE DO NOT WRITE ON THIS PAGE

11
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