OXFORD CAMBRIDGE AND RSA EXAMINATIONS
General Certificate of Secondary Education

INFORMATION AND COMMUNICATION TECHNOLOGY

ICT B (Foundation Tier)

Friday	**20 JANUARY 2006**	Afternoon	1 hour

2380/01

Additional materials:
Candidates answer on the question paper.
Flowchart stencil
Candidates pre-prepared materials

Candidate Name	

Centre Number						

Candidate Number				

TIME 1 hour

INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and candidate number in the spaces at the top of this page.
- Answer **all** questions.
- Write your answers in the spaces provided on the question paper.
- Do not write in the bar code. Do not write in the grey area between the pages.
- **DO NOT** WRITE IN THE AREA **OUTSIDE** THE BOX BORDERING EACH PAGE. ANY WRITING IN THIS AREA WILL NOT BE MARKED.

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.

FOR EXAMINER'S USE	
question number	marks
1	
2	
3	
4	
5	
6	
7	
8	
TOTAL	

This question paper consists of 9 printed pages and 3 blank pages.

[Turn over

1 Part of the new database used by Wordsworth Health Centre is shown in the table below.

Patient number	Title	Surname	First Name	Address line 1	Address line 2	Post code	Blood type	Doctor
0436	Mr	Smith	John	17 Bridge Road	Wordsworth	WW4 8LP	A	Dr Khan
0766	Ms	Cushing	Sally	123 North Road	Wordsworth	WW1 2DP	AB	Dr Jones
0145	Miss	Williams	Noreen	19 Greenbank Road	Wordsworth	WW5 9EL	B	Dr Khan
0682	Mr	Smith	John	9 Acacia Avenue	Wordsworth	WW3 8RD	B	Dr Peterson
0337	Mrs	Lee	Kim	5 Elm Avenue	Wordsworth	WW7 3BR	A	Dr Jones

(a) Identify the name of **one** field shown in the database.

....[1]

(b) Identify the name of the key field.

.... [1]

(c) What is a key field?

....

.... [2]

(d) From the data shown in the database, state **one** problem that could arise if there was not a key field.

....

.... [1]

(e) Circle **one** record in the table. [1]

(f) Not all of the staff need to see all of the personal data in the database.

Describe **one** way that staff can be prevented from accessing all the personal data.

....

....

.... [2]

2   In some health centre situations, a concept keyboard is more appropriate than a traditional keyboard because:

Tick each correct answer.

concept keyboards are easier to clean	
concept keyboards only work with Macintosh computers	
concept keyboards are easier to use wearing gloves	
concept keyboards are much smaller than traditional keyboards	
concept keyboards are more difficult to use	
concept keyboards are more hygienic as they have no moving parts	
concept keyboards can be used in areas where there are fluids	
concept keyboards are ideal for large amounts of text input	
concept keyboards can have pictures on	

[5]

[Turn over

3 The table below shows the results of a survey of all new patients at Wordsworth Health Centre.

Survey of Patients 17th to 28th June 2005				
Number of Patients		Total	540	
		Attended	461	
		Did not attend	79	
Number of patients participating in the survey				
		Answered the questions	406	
		Refused to answer the questions	55	
Respondents' replies to questions				
Internet access at home				
		Yes	279	69%
		No	127	31%
Have you ever used the Wordsworth Health Centre website?				
		Yes	35	9%
		No	371	91%
Would you use the website in future if it was easier to access information?				
		Yes	214	53%
		No	192	47%

(a) How many patients surveyed have Internet access at home?

.... [1]

(b) Give **one** way the data for Internet access at home could be displayed graphically.

.... [1]

(c) Do many patients use the health centre website?

.... [1]

(d) Using data from the table explain why the health centre may wish to invest in a new website.

....

....

....

.... [4]

4 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.

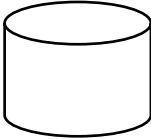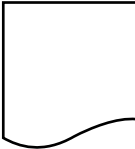| Task	Type of software
to send reminders to patients about appointments	
to develop a health centre website	
to record patient details	
to calculate the health centre's budget	
to produce a three-fold health campaign leaflet	
to redesign the waiting room	

[6]

[Turn over
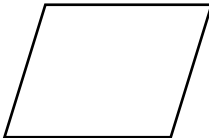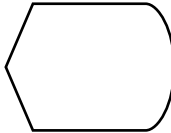
5 Systems designers use systems flow charts.

A systems designer is currently designing a patient appointment booking system for Wordsworth Health Centre.

The chart below shows symbols to be used in the flow chart and what they represent. Complete the chart by giving a use for each symbol and the hardware device needed for this use.

The first row has been done for you.

Symbol	Name	Use	Device
	Magnetic disk	To store the data and software	Hard Drive
	Document or printed output		
	Manual input		
	Process		
	Display		

[8]

6 The health centre's new computer system includes a database storing personal data about patients.

Some patients are worried about the use of this personal information.

(a) Describe **two** ways in which personal information held on patients could be misused.

Way 1 ....

.... [2]

Way 2 ....

.... [2]

(b) The Data Protection Act contains basic principles relating to personal data.

State **four** of the basic principles that the health centre must observe in connection with its patient database.

Principle 1

....

.... [1]

Principle 2

....

.... [1]

Principle 3

....

.... [1]

Principle 4

....

.... [1]

7   Records of patient consultations are currently written manually and filed in individual patient envelopes in the reception area. The practice manager wants to improve this system by introducing electronic filing of patient records.

State **four** advantages of electronic filing of patient records.

Advantage 1

....

.... [1]

Advantage 2

....

.... [1]

Advantage 3

....

.... [1]

Advantage 4

....

.... [1]

8 Wordsworth Health Centre needs a data capture form to register new patients. Design a suitable form for this purpose. Your form should contain all the essential data likely to be required.

[9]

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12

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