GCSE

INFORMATION AND COMMUNICATION TECHNOLOGY

ICT B (Higher Tier)

H **2380/02**

Morning

WEDNESDAY 6 JUNE 2007

Time: 1 hour 30 minutes

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

Candidate
Name

Centre
Number

Candidate
Number

INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and Candidate number in the boxes above.
- Answer **all** the questions.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- Do **not** write in the bar code.
- Do **not** write outside the box bordering each page.
- WRITE YOUR ANSWER TO EACH QUESTION IN THE SPACE PROVIDED. ANSWERS WRITTEN ELSEWHERE 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 **80.**
- No marks will be awarded for using brand names of software packages or hardware.

FOR EXAMINER'S USE	
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TOTAL	

This document consists of **12** printed pages and an Insert.

1   Wordsworth Dental Practice stores data about patients. The Data Protection Act protects patients from the incorrect use of data.

Tick **four** statements from the table below that are true:

	True? ✓
Each patient must agree to the storage of sensitive data about him/herself.	
The practice must state the purpose for which the data is required.	
The practice can collect any amount of data on each patient.	
It does not matter if some of the data stored is inaccurate.	
Data must be kept up to date.	
Once data has been collected, it can be kept indefinitely.	
The practice must take steps to ensure that data is not lost or misused.	

[4]

2   Wordsworth Dental Practice has a multimedia website.

   (a) Explain the term multimedia

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   ....

   ....

   ....

   .... [4]

   (b) Why might some patients of Wordsworth Dental Practice find the multimedia website slow when they are trying to access information from their home computer?

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   ....

   .... [2]

3 One of the dentists finds it quite difficult to type information into the computer.

Describe **one** method of inputting text that does not require typing.

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.... [2]

4 Wordsworth Dental Practice needs a method of transferring files between computers that are not on the network.

Discuss the benefits and drawbacks of the following storage devices for this purpose:

- Flash memory/memory stick

- DVD

- CD

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.... [6]

[Turn over

5 Wordsworth Dental Practice has purchased three different types of computer system.

> Networked desktop computer
> Notebook / laptop computer
> Palmtop Computer / Personal Digital Assistant (PDA)

Explain the benefits of each system to the dental practice.

Networked desktop computer

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.... [2]

Notebook / laptop computer

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.... [2]

Palmtop computer / PDA

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.... [2]

6 Wordsworth Dental Practice has purchased a database software package from a shop. The software is in a box.

(a) State **two** different types of media that the box could contain

Type 1 ....

Type 2 .... [2]

(b) The software is contained in a sealed envelope. Explain the reason for the seal.

....

.... [2]

7 Describe why it is easier to illegally obtain software than it is to steal other goods such as a book.

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.... [6]

[Turn over

8 Wordsworth Dental Practice has downloaded some free software from the Internet. The chart below shows three different types of software licence. The chart also lists four of the rules related to different types of licence.

Indicate with a tick each statement that relates to each of the three types of licence listed.

	Copyrighted software	Shareware	Public Domain Software
Legal to make copies			
Legal to sell a copy			
Legal to give a copy to a friend			
Protected by law			

[6]

9 All the dentists at the practice use a password to access the computer system. Some types of password are easy for hackers to break.

(a) Discuss with reasons the advantages and disadvantages of different types of password.

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.... [6]

(b) Give **one** other measure that can be used to prevent unauthorised access to computer systems.

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.... [1]

10 Wordsworth Dental Practice are installing data encryption software.

Describe what is meant by data encryption and state why it is needed by Wordsworth Dental Practice.

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.... [4]

[Turn over

11 Patients often find it difficult to get an appointment with their chosen dentist at a convenient time. The practice has reviewed a number of on-line software applications used for checking the availability of a particular dentist. The table below shows the results of this review:

Each software package has been scored out of ten for each of the given needs. 10 is the best; 1 the worst (e.g. 10 cheapest, 1 most expensive).

Package	Ease of use	Speed	Data size	Compatibility with existing software	Price
A	8	8	10	7	1
B	9	9	4	3	6
C	3	9	9	9	4
D	3	3	9	3	10

State which software package you would choose.

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Describe why you have chosen this software package by comparing its advantages and disadvantages with the other packages shown in the chart.

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.... [8]

12 Wordsworth Dental Practice uses a house style for all their documents. Describe how each of the following could be used to maintain house style.

Document templates

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.... [3]

Formatting text by using styles

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.... [2]

13 Wordsworth Dental Practice uses spreadsheet software to calculate the cost of treatment. Describe the advantages of using spreadsheet software rather than a calculator for calculating these costs.

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.... [4]

[Turn over

14 A section of the Wordsworth Dental Practice database is shown below.

Patient Surname	Patient First Name	Mobile Telephone Number	E-mail	Address	Postcode	Date of Birth	Patient Number
Ahmed	Julie	07459 668123	ahmedJ@wordsworth.com	12 The Lane, Wordsworth	DE6 6DD	15/15/52	0015
Avenue	Jack	07884 335478	No email	The Mill, Hilltown	FD5 6NB	16/08/65	0012
Brackley	John	07760 567890	Jbrackley@wordsworth.com	Not known		07/01/75	0001
Brent	Sally	07996 451735	Sbrent@wordsworth.com	13 Hill View, Hampton	HH5 8UH	16/08/68	0007
Cushing	Brad	07652 555486	cushingB@wordsworth.com	15 High Street, Wordsworth	DE4 4FD	02/08/46	0009
Wong	Su	07632 698522	wongs@wordsworth.com	22 East View, Littletown	DD7 8QA	08/02/55	0005

(a) One of the date of birth entries is incorrect.

Describe how the database could have been set up to prevent this error.

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.... [2]

(b) Describe the following terms.

(i) Field ....

.... [1]

(ii) Record ....

.... [1]

15 Wordsworth Dental Practice has asked you to redesign the pages on their website.

You have been asked to show the main features for each of the following pages:

- dental hygiene page
- dental products ordering page.

[8]

PLEASE DO NOT WRITE ON THIS PAGE