OCR
RECOGNISING ACHIEVEMENT

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
Advanced Subsidiary GCE

COMPUTING 2508

Computer Systems Development and Practical Applications

Thursday **9 JUNE 2005** Afternoon 1 hour 30 minutes

Candidate Name	Centre Number	Candidate Number

TIME 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

- Write your name in the space above.
- Write your centre number and candidate number in the boxes above.
- Answer **all** the questions.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- If you run out of space for an answer, continue on the spare pages at the back of the booklet.
- If you use these spare pages, you must write the question number next to your answer. You can also use the spare pages for rough work.

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 90 of which 4 marks are allocated to the assessment of the quality of written communication.
- You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.
- No marks will be awarded for using brand names of software packages or hardware.

FOR EXAMINER'S USE	
1	
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7	
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TOTAL	

This question paper consists of 11 printed pages, 3 lined pages and 2 blank pages.

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[Turn over

1 The manager of a warehouse wishes to improve the current information system. The systems life cycle is used to plan this improvement.

(a) State **six** stages of the *systems life cycle*.

1. .....

2. .....

3. .....

4. .....

5. .....

6. .....[6]

(b) Describe **four** of these stages.

1. Name of stage.....

Description .....

.....

.....[2]

2. Name of stage.....

Description .....

.....

.....[2]

3. Name of stage.....

Description .....

.....

.....[2]

4. Name of stage.....

Description .....

.....

.....[2]

As the new system is developed, user and technical documentation are produced.

(c) (i) State **four** different sections normally found in *user documentation*.

1. .....

.....

2. .....

.....

3. .....

.....

4. .....

.....[4]

(ii) State **two** purposes of *technical documentation*.

Purpose 1 .....

.....

Purpose 2 .....

.....[2]

2 State and describe a suitable method of changeover for each of the following applications.

(a) Introducing a new electronic point of sale (EPOS) system for a chain of DIY stores over a period of time.

Method of changeover.....

Description .....

.....

.....

.....[3]

(b) Introducing a new set of traffic lights for a major road junction.

Method of changeover.....

Description .....

.....

.....

.....[3]

3 A fashion design company uses a computer aided design (CAD) package to design a range of clothing.

(a) State **three** features of a CAD package and give an example of how each would be used in designing a new range of clothing.

Feature 1.....

.....

Use.....

.....[2]

Feature 2.....

.....

Use.....

.....[2]

Feature 3.....

.....

Use.....

.....[2]

(b) The company intends to purchase new software for administration activities.

(i) State **three** advantages to the company of purchasing off-the-shelf software.

1. .....

.....

2. .....

.....

3. .....

.....[3]

(ii) State **three** advantages to the company of purchasing custom written software.

1. .....

.....

2. .....

.....

3. .....

.....[3]

4 Products in a supermarket are bar coded.

(a) State **two** reasons for using a *bar code system* in a supermarket.

Reason 1 .....

.....

Reason 2 .....

.....[2]

(b) State **two** drawbacks of using a *bar code system* in a supermarket.

Drawback 1 .....

.....

Drawback 2 .....

.....[2]

Customers can use a loyalty card, containing a magnetic stripe to receive discounts on goods purchased. The stripe contains a customer reference number.

(c) State **three** advantages of using a magnetic stripe on a customer loyalty card instead of keying in the customer reference number.

Advantage 1 .....

.....

Advantage 2 .....

.....

Advantage 3 .....

.....[3]

(d) Name and describe **three** different methods that could be used to validate the customer reference number.

Method 1 .....

.....

.....[2]

Method 2 .....

.....

.....[2]

Method 3 .....

.....

.....[2]

5 Command driven and form driven are two types of user interface.

(a) State **three** features of a *command driven interface*.

Feature 1 .....

.....

Feature 2 .....

.....

Feature 3 .....

.....[3]

(b) State **three** features of a *form driven interface*.

Feature 1 .....

.....

Feature 2 .....

.....

Feature 3 .....

.....[3]

(c) Graphical user interfaces (GUI) are easier for users to learn quickly.
State **four** features of a GUI.

Feature 1 .....

.....

Feature 2 .....

.....

Feature 3 .....

.....

Feature 4 .....

.....[4]

6 A water company produces customer bills quarterly.

(a) Customer meters are read manually and the readings are recorded onto a turnaround document.

Explain what is meant by a turnaround document.

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.....

.....[2]

(b) The readings are processed and bills produced by the computer system.

State and justify a suitable method of processing the bills.

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.....[4]

7 A health centre uses computers to store medical details of their patients.

(a) Describe how the Data Protection Act applies to patient data.

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.....[8]

The doctors at the health centre are considering the installation of an expert system to aid diagnosis.

(b) Name and describe **three** components of an *expert system*.

Component 1.....

Description .....

.....

.....[2]

Component 2.....

Description .....

.....

.....[2]

Component 3.....

Description .....

.....

.....[2]

(c) A terminal will be provided in the waiting room to allow a patient to obtain a diagnosis of minor problems.

Describe the implications of patients using this system.

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.....[5]

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