OCR
RECOGNISING ACHIEVEMENT

ADVANCED SUBSIDIARY GCE UNIT **2508**

COMPUTING

Computer Systems Development and Practical Applications

TUESDAY 22 MAY 2007   Morning

Time: 1 hour 30 minutes

Additional materials:
No additional materials are required.

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.
- If you run out of space for an answer, continue on the spare pages at the back of the booklet.
- WRITE YOUR ANSWER TO EACH QUESTION IN THE SPACE PROVIDED. ANSWERS WRITTEN ELSEWHERE WILL NOT BE MARKED.

INFORMATION FOR CANDIDATES

- The number of marks for each question 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		
Question no.	Max. mark	Mark
1	28	
2	6	
3	12	
4	4	
5	8	
6	14	
7	6	
8	8	
WC	4	
Total	90	

This document consists of **12** printed pages, **3** lined pages and **1** blank page.

1   A college decides to develop a new information system.

   (a) State **three** methods of fact finding that may be used by the systems analyst during analysis. For each method, state **one** advantage and **one** disadvantage.

   Method 1 ....

   Advantage ....

   ....

   ....

   Disadvantage ....

   ....

   ....[3]

   Method 2 ....

   Advantage ....

   ....

   ....

   Disadvantage ....

   ....

   ....[3]

   Method 3 ....

   Advantage ....

   ....

   ....

   Disadvantage ....

   ....

   ....[3]

(b) Explain the role of the end-user in the testing stage.

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....[4]

(c) Describe **three** methods of changeover to a new system.

Method 1 ....

....

....

Method 2 ....

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....

....

Method 3 ....

....

....

....[6]

(d) State **three** criteria that may be used in the evaluation of the system.

1. ....

....

2. ....

....

3. ....

....[3]

[Turn over

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

Purpose 1 ....

....

Purpose 2 ....

....[2]

(f) When the information system has been in use for some time, it may require software maintenance.

Explain why software maintenance may be required.

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....[4]

2 Describe **three** different types of validation tests that can be carried out on input data.

1 ....

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....

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2 ....

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....

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3 ....

....

....

....[6]

3 Describe the following methods of data capture. For each state a suitable use.

Barcode

Description ....

....

....

....[2]

Use ....[1]

Voice recognition

Description ....

....

....

....[2]

Use ....[1]

Touch screen

Description ....

....

....

....[2]

Use ....[1]

Optical Character Recognition (OCR).

Description ....

....

....

....[2]

Use ....[1]

[Turn over

4 A youth club wishes to purchase new software to carry out administration activities.

State a suitable type of software package for each of the following activities. In each case, give a reason for your choice.

To produce newsletters

Type of software ....

Reason ....

....

....[2]

To maintain member records

Type of software ....

Reason ....

....

....[2]

5 Software may be custom-written or purchased off-the-shelf.

(a) State **four** reasons for purchasing custom-written software for controlling the production line in a factory.

1. ....

....

2. ....

....

3. ....

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4. ....

....[4]

(b) State **four** reasons for purchasing off-the-shelf software for the payroll in the factory.

1. ....

....

2. ....

....

3. ....

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4. ....

....[4]

[Turn over

6 A building society's computer system works in batch processing mode at night and supports interactive processing during business hours.

(a) Explain what is meant by the following terms.

Batch processing

....

....

....

....[2]

Interactive processing

....

....

....

....[2]

(b) (i) State **two** tasks that the computer would carry out in batch processing mode.

1. ....

....

2. ....

....[2]

(ii) State **two** tasks that the computer would carry out in interactive mode.

1. ....

....

2. ....

....[2]

The building society is considering installing an expert system to process applications for mortgages.

(c) Describe **three** components of an expert system.

Component 1 ....

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....

....

Component 2 ....

....

....

....

Component 3 ....

....

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....[6]

[Turn over

7 Form driven and command line are two types of user interface.

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

  Feature 1 ....

  ....

  Feature 2 ....

  ....

  Feature 3 ....

  ....[3]

  (b) State **three** features of a command line interface.

  Feature 1 ....

  ....

  Feature 2 ....

  ....

  Feature 3 ....

  ....[3]

8 Many employers allow their staff to use technology to work from home.

  (a) State **two** advantages to the employer of staff working from home.

  Advantage 1 ....

  ....

  Advantage 2 ....

  ....[2]

  (b) State **two** disadvantages to the employer of staff working from home.

  Disadvantage 1 ....

  ....

  Disadvantage 2 ....

  ....[2]

(c) To protect personal data used by organisations, the government continues to review current data protection legislation.

Describe **two** limitations of current data protection legislation.

Limitation 1 ....

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....

Limitation 2 ....

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....[4]

If you use these lined pages to complete the answer to any question. The question number **must** be clearly shown.

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14

15

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