

Candidate Name	Centre Number	Candidate Number
		2



**GCE AS/A level**

1241/01

**New AS**

**INFORMATION AND  
COMMUNICATION TECHNOLOGY**

**ICT1**

**INFORMATION SYSTEMS**

P.M. MONDAY, 12 January 2009

2¼ hours

**INSTRUCTIONS TO CANDIDATES**

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Answers should be written in the spaces provided. Where the space is not sufficient for your answer continue the answer at the back of the book, taking care to number the continuation correctly.

The intended marks for questions or part questions are given in brackets [ ]. You are advised to divide your time accordingly. The total number of marks available is 80.

You are reminded of the necessity for good written communication and orderly presentation in your answers.

Quality of written communication will be assessed in question 8.

For Examiner's use only		
Question	Maximum mark	Mark awarded
1	7	
2	4	
3	6	
4	8	
5	5	
6	6	
7	6	
8	18	
9	4	
10	16	
<b>Total</b>	<b>80</b>	

**SECTION A**

*Answer all questions.*

1. Several types of Human Computer Interfaces (HCIs) are used with computer systems. Each type of HCI provides specific benefits to the user.

(a) Describe a sensible use and benefit of the following types of HCI.  
*You should describe a different use and benefit in parts (i) and (ii).*

(i) A touch sensitive screen.

[2]

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(ii) A biometric device.

[2]

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(b) Name an application which uses a voice interface and discuss any disadvantages associated with the use of voice interfaces. [3]

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4. Database programs are often used for stock control.

(a) Some of the functions of the programs are mentioned below. State the purpose of each function and give an appropriate example of its use.

(i) query, [2]

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(ii) report, [2]

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(iii) import/export. [2]

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(b) Flat file databases are now less widely used. Give two advantages of a relational database approach over flat files. [2]

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- 7. Both LAN's and WAN's are widely used in health care. Using suitable examples describe the impact these different types of networks are having upon the working practices in the Health Service. [6]

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- 8. ICT has had a big impact on the home.
  - (a) Illustrating your answer with suitable examples, discuss both the benefits and drawbacks of the impact of ICT on 'home entertainment'. [10]

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**SECTION B**

*Answer all questions.*

- 9. A small building company wants to use computer software to calculate the staff wages and also to give quotes to customers for building jobs.

Describe the benefits to be gained from using *spreadsheet software* for these purposes. [4]

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**YOU MUST REFER TO YOUR OWN SPREADSHEET TO ANSWER THE FOLLOWING QUESTION.**

**IF NO SPREADSHEET EVIDENCE IS SUBMITTED THEN NO MARKS CAN BE AWARDED.**

- 10. (a) Describe the purpose or function of **two** different *formulas* from the following list, SUM, COUNT, MAX, MIN, AVERAGE, RAND, which you used in your spreadsheet. [4]

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(b) Describe in detail **one** method of simplifying *data entry* you created in your spreadsheet stating **two** advantages and **one** disadvantage of using such techniques for entering data into a spreadsheet. [4]

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(c) Describe **two** methods of *validation error trapping* used in your spreadsheet. [4]

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- (d) Describe the purpose or function of **two** other *different advanced processes* you used in your spreadsheet. [4]  
*In your answer do not describe any feature you gave in parts (a), (b) or (c).*

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**ENSURE YOU ATTACH THE PRINTOUTS OF YOUR SPREADSHEET TO YOUR EXAMINATION ANSWER PAPER.**