

Surname
Other Names

Centre Number

Candidate Number
2



GCE AS/A level

1241/01

**INFORMATION AND
COMMUNICATION TECHNOLOGY
IT1
INFORMATION SYSTEMS**

P.M. MONDAY, 16 January 2012

2 ¼ hours

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.

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 use a continuation sheet, 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 (b).

Make sure you hand in your spreadsheet with this booklet at the end of the examination.

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

SECTION A

Answer all questions.

1. (a) Define the term *knowledge*. Using a suitable example, illustrate the relationship between *data*, *information* and *knowledge*. [4]

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- (b) Other than ‘*it takes less time to type in*’, give **two** reasons to explain why data is encoded before being entered into a computer system. [2]

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- (c) By referring to an appropriate example, describe **one** problem associated with encoding of data. [2]

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2. Good quality information must use *accurate* and *valid* data.

(a) Explain what is meant by the term *accurate* data. [1]

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(b) “Data entered into a computer may not be accurate but still be accepted as valid.” Using a suitable example, explain the difference between accuracy and validity. [2]

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(c) Other than information being *accurate* and *valid*, describe using examples, **two** other characteristics of good quality information. [2]

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(d) Other than by aiding the decision making process, describe, using an example, **one** way in which good quality information can add value to an organisation. [2]

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3. Architects use Computer Aided Design (CAD) software when designing a new house. Describe an advantage that **each** of the following features of CAD software gives an architect when designing a new house. [4]

zoom stress/strain walkthrough hatching/rendering

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4. *Presentation software* is used to create tutorials for pupils to learn about new software. Describe the following features and explain how **each** benefits the presentation.

(i) Animated transitions, [2]

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(ii) Templates, [2]

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(iii) Hyperlinks.

[2]

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5. Electronic mail has become essential to many companies because of the speed with which it can get messages around the globe. Other than speed, explain the advantages and disadvantages of using email. [4]

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7. Efficient data processing systems offer many advantages when processing large amounts of data.

(a) Other than *hardware* and the *quality of data being entered*, describe **three** factors affecting the efficiency of data processing systems. [3]

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(b) ICT systems *search* and *process data* much faster than manual systems. Describe **two** additional advantages of ICT over manual methods of data processing using suitable examples in **each** case. [4]

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(d) Describe, giving the purpose, **two** different functions or processes you used in your spreadsheet. [4]

In your answer do not describe any formula, function or process listed in **10** (a) or mentioned in your answers to (b) or (c).

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