

ADVANCED SUBSIDIARY GCE
INFORMATION AND COMMUNICATION TECHNOLOGY G061
Information, Systems and Applications

Candidates answer on the Question Paper

OCR Supplied Materials:
None

Other Materials Required:
None

Thursday 14 January 2010
Afternoon

Duration: 2 hours



Candidate Forename		Candidate Surname	
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Centre Number						Candidate Number				
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INSTRUCTIONS TO CANDIDATES

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Answer **all** the questions.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided, however additional paper may be used if necessary.

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 **120**, of which marks are allocated to the assessment of 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.
- This document consists of **20** pages. Any blank pages are indicated.

A company manufactures electronic tills for use in shops.

The company is producing a user guide to using the tills in shops.

- 1 (a) Describe **two** advantages of using direct sources to gather information to be included in the user guide.

Advantage 1

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Advantage 2

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..... [4]

- (b) The user guide contains information. The user will convert the information into knowledge.

Define what is meant by the term knowledge.

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..... [2]

(c) Describe, using examples related to the user guide, how the following can affect the quality of information:

Level of detail

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.....
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Presentation

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Relevance

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.....
..... [6]

(d) Identify **one** personnel, **one** software and **one** consumable cost that the company would incur when producing the user guide.

Personnel

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Software

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Consumable

..... [3]

2 Every evening the user guide is backed up.

(a) What is a backup?

..... [1]

(b) Give **one** situation where the company might need to use the backup.

.....
..... [1]

(c) The company has chosen to use a USB memory stick for storing the backup.

Explain why this is an appropriate storage device to use.

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..... [2]

3 The company owns several standalone computers, each with a printer and connection to the internet. Each computer has an operating system and utility software installed.

(a) Describe **one** role of the operating system.

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..... [2]

(b) A utility program installed on the computers is anti-virus software.

Identify **two** other utility programs that could be installed on the computers.

Utility 1

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Utility 2

..... [2]

(c) Identify **two** specialist software applications that could be used by physically disabled users.

Application 1

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Application 2

..... [2]

(d) Identify **two** output devices that could be used with an electronic till.

Device 1

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Device 2

..... [2]

(e) Describe **two** reasons why the company's computers should be networked.

Reason 1

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Reason 2

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..... [4]

The company has decided to write a database to store information about its sales.

4 The entities that will be used in the database are:

CUSTOMER: A list of the customers that have purchased tills from them

TILL: A list of tills that is produced by the company

SALESPERSON: The member of the company who was responsible for the sale

ORDER: The details of the orders placed by the company

ORDER_LINES: The details of the individual tills that make up each order

(a) Draw the Entity Relationship Diagram (ERD) making sure that the degree of each relationship is identified.

[6]

(b) Identify **two** characteristics of data in second normal form (2NF).

Characteristic 1

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Characteristic 2

..... [2]

(c) The telephone number field in the CUSTOMER entity has the data type text.

Explain why text has been chosen as the data type for the telephone number.

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..... [2]

(d) Identify and describe **two** different validation routines that could be used for the telephone number field.

Routine 1
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Routine 2
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..... [4]

5 The company has created a database input form for entering customers' details.

Explain **three** advantages of tailoring the form.

Advantage 1

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Advantage 2

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Advantage 3

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..... [6]

6 The company uses a spreadsheet to model future sales.

(a) The company can use formulae and functions within the software to create what-if calculations.

Describe **two** other characteristics of spreadsheet software that the company could use to model future sales.

Characteristic 1

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Characteristic 2

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..... [4]

(b) Explain **three** advantages to the company of using spreadsheet software to answer what-if questions.

Advantage 1

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Advantage 2

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Advantage 3

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..... [6]

7 The company uses a computerised stock control system.

Describe the characteristics of a stock control system.

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..... [6]

8 The company has a number of applications packages installed on its computers.

(a) Identify tasks that the following could be used for.

Desktop Publishing Software

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Graphics Software

..... [2]

(b) The company uses web page authoring software to create web pages to advertise its services to prospective customers. The web page authoring software allows the company to use macros when developing web pages.

Describe **two** advantages to the company of being able to use macros in web page authoring software.

Advantage 1

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Advantage 2

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..... [4]

9 The company has created a style sheet for the design of all letters it sends to customers.

(a) Identify **three** elements that could be included in the style sheet.

Element 1

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Element 2

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Element 3

..... [3]

(b) Describe the difference between a style sheet and a template.

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..... [2]

(c) The company uses sections and footnotes in reports.

Describe the characteristics of sections and footnotes and give an example of how the company could make use of them.

Sections

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Example of Use

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Footnotes

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Example of use

..... [6]

13
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Question 10 starts on page 14.

10 The company has created a presentation that can be used at a trade fair. They could deliver the presentation using a computer and projector or printed acetate.

(a) Compare these two methods for delivering a presentation.

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..... [3]

(b) The managing director of the company is giving a presentation to a group of potential customers at the trade fair.

Describe **three** advantages to the managing director of using manual transition to give the presentation.

Advantage 1
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Advantage 2
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Advantage 3
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..... [6]

(c) Give an example where the use of automatic transition would be suitable.

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..... [1]

(d) (i) Describe what is meant by a non-linear presentation.

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..... [2]

(ii) Give **one** advantage of a non-linear presentation.

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..... [1]

(iii) Give **one** example where the use of a non-linear presentation would be suitable.

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..... [1]

PLEASE TURN OVER FOR THE NEXT QUESTION

- 11** Discuss the impacts and consequences of the Regulation of Investigatory Powers Act (2000) on the employees of the company.

The quality of your written communication will be assessed in your answer to this question.

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- 12 Discuss how possible future developments in communications technology could impact on how the company communicates with its customers.

The quality of your written communication will be assessed in your answer to this question.

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