

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 13 January 2011

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, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Answer **all** the questions.
- Do **not** write in the bar codes.

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.

Miss Jones has recently retired and is thinking of setting up a landscape gardening company.

- 1 Miss Jones is currently researching landscape gardening services and the prices charged by her competitors.

- (a) Give examples of **three** different direct sources Miss Jones could use to collect the data.

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[3]

- (b) Using an example, show how structure, context and meaning can be added to the data collected about landscape gardening to turn it into information.

Data

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Structure

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Context

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Meaning

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[4]

- (c) Using an example related to landscape gardening, describe the difference between information and knowledge.

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[2]

- 2 Miss Jones is going to enter the data she has collected into a spreadsheet so that she can analyse it.

- (a) The data needs to be validated.

What is the purpose of validation?

..... [1]

- (b) The data needs to be verified.

Describe **two** different verification methods that Miss Jones could use.

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[4]

- 3** Having decided to go ahead with the landscaping gardening business, Miss Jones wants to produce an advertising leaflet.

- (a) Identify **two** different consumable costs that will be incurred in the production of the leaflet.

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- (b) Miss Jones will need to use hardware and software to produce the leaflet

Using examples, describe the difference between hardware and software

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- (c) Miss Jones has purchased a desktop publisher and a database

Place each task from the list below under the most appropriate application she should use to complete the task.

- Create a business card
- Store customer records
- Create calendar
- Create report of customers sales

Desktop Publisher	Database

[2]

- (d) (i) Identify an appropriate input device for creating on-screen sketches of gardens to show to the customer.

..... [1]

- (ii) Identify an appropriate input device for adding images into the brochures.

..... [1]

- (e) (i) Identify **two** differences between vector and bitmap graphics.

1

2

..... [2]

- (ii) Explain why a vector image is suitable for use in the leaflet.

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..... [2]

- (f) Some of Miss Jones' employees are physically disabled.

Identify and describe **two** items of specialist software that physically disabled employees could use.

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[4]

4 Miss Jones wants to set up a database about her customers, services, jobs and jobcards.

- Customers are people who own the gardens.
- Services are the different tasks that the company can perform; for example, mowing the lawn or weeding.
- Jobs are where an appointment has been booked for a customer.
- Jobcards are the details of the services for a particular job.

The data structure needs to be normalised.

(a) Describe **two** advantages of normalisation.

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[4]

Four of the entities in the database will be CUSTOMER, SERVICE, JOB and JOBCARD.

(b) (i) What is the degree of the relationship between CUSTOMER and JOB?

..... [1]

(ii) What is the degree of the relationship between SERVICE and JOBCARD?

..... [1]

- (c) Explain **three** advantages of creating the database by tailoring a generic database application.

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[6]

- (d) A customer form has been created to enter customer details.

Using examples related to the customer form, describe **three** different form controls that could be used.

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[6]

- (e) Describe the characteristics of a job booking system that could be used by Miss Jones.

[6]

. [6]

- 5 Over time, the landscape gardening business has grown and Miss Jones wants to take over a local competitor.

- (a) Miss Jones has been advised to use software to model the expansion of her business.

Give **two** reasons why Miss Jones should use a model to predict this expansion.

1

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..... [2]

- (b) Using examples related to the landscape gardening business, describe how Miss Jones could make use of workbooks and ranges.

Workbooks

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Ranges

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..... [4]

- (c) Using examples related to the landscape gardening business, describe how Miss Jones could use absolute and relative cell references.

Absolute

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Relative

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..... [4]

- 6 Miss Jones needs to write a report for the bank about the expansion of the business.

- (a) The data for the report comes from different applications with no common format.

Identify the steps involved in transferring data between application A and application C without using cut/copy/paste. Application A and application C have no common format. The first and last steps have been given.

Data to be transferred is opened in Application A

Data has been transferred and is opened in Application C

[4]

- (b) Identify **two** advantages of using styles in the finished report.

1

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2

..... [2]

- (c) (i) Identify **two** characteristics of wizards.

1

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2

..... [2]

- (ii) Give an example of how Miss Jones could make use of a macro when writing the report.

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..... [1]

- (d) Describe how Miss Jones could make use of sections, frames and footnotes in the finished report.

Sections

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Frames

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Footnotes

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[6]

- (e) The report needs to fit onto one side of A4.

Identify **four** different changes Miss Jones could make to the report to fit it onto one side of A4 without losing any content.

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[4]

- 7 Having expanded her business by taking over a local landscape gardening company, Miss Jones finds that the standards used in the two different ICT systems are not compatible.

Explain the impact on the business of having two different standards.

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[4]

- 8 Miss Jones is aware of the need to secure her ICT system.

- (a) Identify **three** software methods Miss Jones could use to secure her ICT system. For each method, explain how it prevents data being stolen.

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[6]

- (b) (i)** The data in the system needs to be backed up and archived.

Describe the difference between backing up and archiving of data.

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[2]

- (ii)** Give an example of data that should be archived.

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[1]

- 9** Miss Jones wants to put together a presentation that can be used at her local County Show.

(a) Describe how the presentation could make use of sound to attract an audience.

[2]

[2]

- (b) Compare the use of automatic and manual transition in the presentation for the County Show.

[3]

[3]

- 10 Miss Jones is concerned about health problems that she might get from working with ICT.

Identify **three** health problems that Miss Jones might get from working with ICT.

For each health problem give an appropriate different solution.

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Solution

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2

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Solution

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3

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Solution

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[6]

- 11 Miss Jones wants to make use of new developments in ICT to assist her marketing the landscape gardening business.

Discuss possible future developments in ICT and their impact on marketing the landscape gardening business.

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

[11]

. [11]

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