

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
AS GCE
G061/01
INFORMATION AND COMMUNICATION
TECHNOLOGY
Information, Systems and Applications
MONDAY 1 JUNE 2015: Morning
DURATION: 2 hours
plus your additional time allowance
MODIFIED ENLARGED 24pt

Candidate forename						Candidate surname				
Centre number						Candidate number				

Candidates answer on the Question Paper.

OCR SUPPLIED MATERIALS:

None

OTHER MATERIALS REQUIRED:

None

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS TO CANDIDATES

Write your name, centre number and candidate number in the boxes on the first page. Please write clearly and in capital letters.

Use black ink. HB pencil may be used for graphs and diagrams only.

Answer ALL the questions.

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).

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.

Your quality of written communication is assessed in the question marked with an asterisk (*).

Any blank pages are indicated.

Answer ALL the questions.

Greenfingers@Coventry is a gardening business. It provides mowing and weeding services to customers.

The business is looking to expand. An advert is being produced to promote its services.

1 (a) Using examples, describe what is meant by:

accuracy of information: _____

presentation: _____

[4]

(b) Greenfingers@Coventry could use different types of sources to find information to go into the advert.

Compare the use of static and dynamic sources to FIND information to go into the advert.

[4]

(c) The advert will include both text and images.

Describe TWO advantages to Greenfingers@Coventry of using clipart images in the advert.

Advantage 1: _____

Advantage 2: _____

[4]

2 Greenfingers@Coventry hopes that the advert will bring in new customers. It has created a spreadsheet model to assist with analysing the new business it hopes to get.

(a) One ‘what-if’ question Greenfingers@Coventry could ask is:

What if we gained 30 new customers – how many new gardeners would we need to employ?

Identify TWO OTHER ‘what-if’ questions Greenfingers@Coventry could ask about the possible expansion of the gardening business.

1 _____

2 _____

[2]

(b) Using examples, describe how Greenfingers@Coventry could make use of cells and ranges in the spreadsheet model of the possible expansion of the gardening business.

Cells: _____

Ranges: _____

[4]

3 Greenfingers@Coventry is employing new office staff. One of the new staff is visually impaired.

(a) (i) Describe TWO specialist HARDWARE devices Greenfingers@Coventry could purchase to assist the visually impaired member of staff.

1 _____

2 _____

[4]

(ii) Describe TWO specialist pieces of software Greenfingers@Coventry could install to assist the visually impaired member of staff.

1 _____

2 _____

[4]

(b) Greenfingers@Coventry is concerned about the amount of time office staff are using the computers.

Describe how the following health problems could be CAUSED. For each give an appropriate, different solution.

Repetitive strain injury (RSI): _____

Solution: _____

Eyesight defects: _____

Solution: _____

[4]

4 Greenfingers@Coventry uses a template to create a personalised quotation for each customer.

(a) Describe TWO advantages of using a template to create the quotation.

Advantage 1: _____

Advantage 2: _____

[4]

(b) The quotation will contain sections and footers.

Give an example of how a section and a footer could be used in the quotation.

Section: _____

Footer: _____

[2]

5 Greenfingers@Coventry uses software to create a model of the customer’s garden so they can see what it will look like over the next year.

Describe TWO disadvantages of using software to create a model of the garden.

Disadvantage 1: _____

Disadvantage 2: _____

[4]

6 Greenfingers@Coventry is investigating using a computerised invoicing system.

Describe THREE characteristics of a computerised invoicing system Greenfingers@Coventry could use.

Characteristic 1: _____

Characteristic 2: _____

Characteristic 3: _____

[6]

7 Greenfingers@Coventry wants to set up a website with an online booking form that would allow customers to book appointments for gardening services.

(a) Describe TWO form controls that could be used to customise the online booking form.

Control 1: _____

Control 2: _____

[4]

(b) Some of the data entered by the customer will be encoded.

(i) Complete the table below giving examples of data that could be encoded on the online booking form. The first one has been done for you.

ORIGINAL DATA	ENCODED DATA
Female	F

[2]

(ii) Describe TWO disadvantages of encoding the data submitted by the online booking form.

Disadvantage 1: _____

Disadvantage 2: _____

[4]

(c) When Greenfingers@Coventry receives a booking request from the website, it is given the following details: name, email and address of customer

date services required

time services required

list of the services required.

Greenfingers@Coventry checks the appointments diary to see if the request can be met.

If the request can be met:

the customer is informed by email that the booking has been confirmed

the booking is written in the diary.

If the request cannot be met:

the customer is sent an email to say that the booking has been declined.

Draw a diagram to show the input, process, storage and output stages for the above system. [5]

(d) Greenfingers@Coventry wants to expand the website to allow customers to pay their invoices online.

One method of payment is credit card.

(i) Check digit validation is one validation method applied to the credit card number when it is entered.

Describe the check digit method of validation.

[2]

(ii) Identify TWO other validation methods that could be used on the EXPIRY DATE of the credit card when it is entered into the website.

Method 1:

Method 2:

[2]

8 Greenfingers@Coventry is computerising its appointments system. A database has been recommended as the most appropriate software to use.

(a) Justify the use of database software for this task.

[6]

(b) (i) Describe the PURPOSE of foreign keys in a database.

[2]

(ii) Describe the PURPOSE of referential integrity in a database.

[2]

- (c) Two of the fields in the database will be number of employees required and number of hours the job will take.

Identify the most appropriate data type for these fields:

Number of employees required:

Number of hours the job will take:

[2]

Part of the completed database is shown below.

AppointmentID	CustomerID	Date	Time	Paid?
900	43	14/6/2016	10.00	Y
901	65	14/6/2016	12.00	Y
902	323	15/6/2016	09.00	N
903	765	15/6/2016	12.00	Y
904	989	16/6/2016	08.30	N
905	341	16/6/2016	12.00	Y
906	45	16/6/2016	14.00	Y
907	43	16/6/2016	16.00	Y
908	56	17/6/2016	13.00	N

(d) Greenfingers@Coventry will use the database to search for bookings.

Write a suitable query to find all bookings on the 16/6/2016 that have been made by customer 43, have been paid and which take place after 12.00.

[4]

**(e) Four of the entities in the completed database are:
stock (for example, plants and fencing. Each stock item is
supplied by one supplier.)**

**suppliers (companies or individuals who supply the
stock. An individual supplier can provide different items
of stock.)**

**customers (individuals who employ Greenfingers@
Coventry to provide gardening services)**

**invoices (costs for each job, including stock used,
completed for a customer by its employees)**

**Create an entity relationship diagram (ERD) for the
above scenario, identifying the degree of the relationship
between the entities. [4]**

9 Greenfingers@Coventry wants to hold a party to celebrate 15 years since it was formed.

Mail merge will be used to create invitations to send to customers.

Describe TWO advantages of using mail merge to create personalised invitations to send to customers.

Advantage 1: _____

Advantage 2: _____

[4]

10 Greenfingers@Coventry has been asked to give a presentation about plants to a local gardening society.

(a) Describe the following features of presentation software that could be used in the presentation:

hyperlink: _____

animation: _____

[4]

(b) Describe TWO advantages of using a computer and projector instead of printed acetate to deliver the gardening presentation.

Advantage 1: _____

Advantage 2: _____

[4]

11 Greenfingers@Coventry needs to back up and archive the customer data held on the computer system.

(a) Describe the difference between backing up and archiving the customer data.

[2]

(b) The data held on the computer system must be kept secure.

Describe TWO methods that could be used to protect the data stored on the system from theft.

Method 1:

Method 2:

[4]

12 (a) Identify TWO principles of the Data Protection Act (1998) that could affect how Greenfingers@Coventry conducts its business.

Principle 1: _____

Principle 2: _____

[2]

(b) The website contains many original designs and images of gardens to which Greenfingers@Coventry holds the copyright.

Describe TWO problems Greenfingers@Coventry could face when trying to enforce its copyright under the Copyright, Designs and Patents Act (1988).

Problem 1: _____

Problem 2: _____

[4]

[illegible]

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