



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Advanced Level

CANDIDATE
NAME

CENTRE
NUMBER

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APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

9713/01

Paper 1

October/November 2009

1 hour and 15 minutes

Candidates answer on the Question Paper.

No additional materials are required.

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

Do not use staples, paper clips, highlighters, glue or correction fluid.

You may use a pencil for any diagrams, graphs or rough working.

DO NOT WRITE IN ANY BARCODES

Answer **all** questions.

The number of marks is given in brackets [] at the end of each question or part question.

The businesses described in this paper are entirely fictitious.

This document consists of **13** printed pages and **3** blank pages.



Scenario 1
Questions 1 and 2

White Nile Foods in Cairo manufactures pre-packed meals. The company has a large-scale food mixer to mix the ingredients. The mixture is then moved to the production line where individual containers are filled and a lid and label is placed on each container. The containers are then moved to the refrigeration plant for storage prior to transportation.

The company would like to use ICT to produce advertising materials to publicise its new range of products.

1 (a) Describe the process control which is used in:

(i) the food mixing process

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(ii) the food packing process.

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(b) Describe the role of the microprocessor in the refrigeration process.

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2 Discuss **two** ways in which the company could advertise its products, indicating the role of ICT for each method.

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Scenario 2
Questions 3, 4 and 5

Roundabout Food Shops is a national chain of supermarkets in India. The head office is in New Delhi though the supermarkets are distributed throughout India. It already has its own website where customers can find out where their local store is and can see what products are stocked.

Roundabout Food Shops wants to develop its website so that customers can order their shopping online and have it delivered to their home. It has employed a number of designers to develop the website. They will work in groups developing different aspects of the website.

They will need to operate a call centre so that if customers have problems with the website they can contact the company about it.

3 (a) Describe how time management software can help the designers to organise the development of the website.

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(b) Describe the security measures that the designers will need to include to prevent personal data being used by unauthorised users.

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4 (a) Describe the steps that a customer using the website would have to follow in order to purchase items and have them delivered.

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(b) Discuss the advantages and disadvantages to the customer of using such a system.

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5 (a) Describe the features of the software used to control the call centre operations.

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(b) Describe the effects that the introduction of online shopping would have on the employment of workers at Roundabout Food Shops. Include the effects on working patterns.

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Scenario 3
Questions 6 and 7

Rajvinder Uppal is the manager of a book publishing company. The company uses an outdated record keeping system for storing details of the books they publish. Rajvinder wants to introduce a more modern system. She has employed the services of a systems analyst, Vikram Patel, to investigate the current system and create a new one.

Vikram will use a variety of methods to collect information about the existing system.

- 6 (a) Describe **two** types of diagram which Vikram could use to record information about the current system.

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- (b) Describe how the recording of information will help with the analysis of the current system.

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(c) Describe how Vikram will identify the information requirements for a new system.

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(c) Describe how the data will be organised on the database to allow Rajvinder to access a book record quickly.

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(d) After the system has been implemented Vikram will need to evaluate it. Describe the process of evaluation.

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