



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Advanced Level

CANDIDATE
NAME

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APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

9713/03

Paper 3

October/November 2008

1 hour 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.

This document consists of **11** printed pages and **1** blank page.



Scenario 1
Questions 1 and 2

A company called ROCK-ICT sells rock music concert tickets via an Internet booking system only. Tickets aren't posted out as customers print out their own tickets. However, it is possible for customers to sell the concert tickets on auction sites. ROCK-ICT are concerned about this and have decided that customers must enter their personal details when booking their tickets. These details will be stored in a database by ROCK-ICT. They are aware that security is an issue due to the nature of the stored information.

To ensure that the details of the concerts are correct, ROCK-ICT is in regular contact with all its stars using video conferencing.

Scenario 2
Questions 3, 4, 5, 6 and 7

South India Airlines is a company making regular flights throughout Asia. They employ a number of pilots who require regular simulator training.

The airline uses the services of Indiamet, who provide local and national weather forecasts. Indiamet have monitored weather conditions over a number of years. All the information is now stored on its large computer system.

South India Airlines is encouraging travel agents to use online booking as it increases company efficiency. The Dhesi travel agency presently uses a manual paper-based system to book flights and holidays. A systems analyst has been brought in to produce an improved computerised system for them. The staff at Dhesi's travel agency could now be prone to health and safety issues once the new computerised system is operational.

South India Airlines require their passengers to produce their passports or ID cards when checking in. The number on the bottom of the back page of a passport is read by a suitable scanning device linking directly to a Government database.

Refer to scenario 1 when answering questions 1 and 2

For
Examiner's
Use

1 (a) Describe the features you would expect to find on the ROCK-ICT web site.

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(b) Describe how ROCK-ICT would provide the details for the customer to print their tickets and how ROCK-ICT would ensure each ticket was unique.

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(c) Describe the advantages to customers of buying tickets from auction sites.

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(d) Discuss the advantages and disadvantages of on-line services in general.

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- 2 (a) Describe the advantages and disadvantages to ROCK-ICT of using video conferencing facilities with its stars.

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- (b) Describe the physical and software security systems ROCK-ICT could use to reassure its customers about the security of their data.

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Refer to scenario 2 when answering questions 3, 4, 5, 6 and 7

For
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Use

3 (a) Describe the advantages and disadvantages of training pilots using flight simulators.

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(b) The training software would need to be 'purpose built'. Explain what is meant by this term.

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(c) Describe the hardware needed in the flight simulator.

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4 (a) Describe how Indiamet uses its computer system to gather information about the weather.

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(b) Describe how this information is processed by the computer system and is then displayed to forecast weather for the next 5 days.

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(c) Describe how the gathered information is used by Indiamet to predict climate changes using 'what if' scenarios.

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5 (a) Describe how the present manual system at the Dhesi travel agency would be analysed.

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(b) The decision to go ahead with the computerised system has been made. Describe ways of implementing the new system, highlighting the advantages and disadvantages of the methods chosen.

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