



Victorian Certificate of Education 1999

INFORMATION PROCESSING AND MANAGEMENT

Common Assessment Task 3: Written examination

Monday 8 November 1999: 3.00 pm to 5.15 pm

Reading time: 3.00 pm to 3.15 pm

Writing time: 3.15 pm to 5.15 pm

Total writing time: 2 hours

QUESTION BOOK

Structure of book

<i>Number of questions</i>	<i>Number of questions to be answered</i>
10	10

Directions to students

Materials

Question book of 4 pages.

One or more script books.

The task

Please ensure that you write your **student number** in the space provided on the front cover of the script book(s).

Read the case study contained in this question book and then answer Questions 1–10.

Answer **all** questions in the script book(s) provided.

Each question is of equal value. Students should spend approximately the same time answering each of the ten questions.

All written responses should be in English.

At the end of the task

Place all other used script books inside the front cover of one of the used script books.

You may retain this question book.

Case study

The Keen Loan Company have branch offices in most cities and provide loans for people wanting to buy cars, boats and other items. Currently, when a customer applies for a loan, the following procedures apply.

- A consultant helps the customer to fill out an application form with their personal details.
- The details are entered into the computer at the branch.
- The details are transferred to the company's central computer through their network.
- The consultant checks the size of the loan request against the value of the item to be purchased with the loan.
- The consultant uses a computer connection to another company called the Little Credit Check Agency. This agency keeps a list of people who have not repaid loans. This computer connection is used to see if the customer has credit problems.
- The consultant types all the information from the application form and the credit check computer into the branch computer. The central computer makes a decision on whether the loan should be granted.
- The customer is then informed on the branch computer screen that their loan has been approved or rejected.
- Approved loans result in a contract being signed at that time. A cheque for the amount of the loan would be posted to the customer the next day.

It is proposed that a new system be implemented to allow people to obtain loans from the company and that most branch offices be closed. The new system would mean people who wanted a loan could contact the company at their Internet site on their home computer or a public Internet computer such as in public libraries. This system would use the current central computer in the same way as the old system.

When applying for a loan with the proposed new system, the following procedures would apply.

- The person would type their details, the amount of money they wish to borrow and the item they want to buy onto an Internet page.
- The new system would check the size of the loan against the value of the item to be purchased.
- The proposed computer system would then check the person's details with the Little Credit Check Agency.
- The central computer would make a decision on whether the loan should be granted.
- The customer is then informed on the Internet page that their loan has been approved or rejected.
- Approved loans result in a cheque for the amount being posted to the customer the next day.

Question 1

Of the following information processing phases

- input
- manipulation (or processing)
- communication

which phase will be **most** affected by the new system? Describe the way in which the phase will be affected.

Question 2

It is anticipated that the new system will cut the cost of handling loan applications. Explain how the new system could cut costs.

Question 3

The system will be developed by the creation of new components to perform tasks such as answering Internet enquiries and performing checks automatically. These new components would then be joined to each other and to the existing components.

- a. Identify this design strategy.
- b. Explain
 - i. an advantage of this design strategy
 - ii. a disadvantage of this design strategy.

Question 4

Describe two legal implications of using the Internet in the loans process.

Question 5

A study has found that while 90% of potential customers have computers, only 40% are connected to the Internet. To overcome the problem of many customers not being connected, the company has two proposals.

Proposal 1 A set of modems and software be purchased and loaned to any potential customer for two weeks for them to use the system.

Proposal 2 A floppy disk with software be posted to each customer without Internet access. The customer would then run a computer program that allows loan information to be typed and stored on the disk. The customer would then post the disk back to the company.

Explain two **disadvantages** of each proposal.

Question 6

In investigating the option of buying modems it is found that two well-established local companies with good reputations and the same warranties have offered to supply the same brand and types of modems. Describe **two** factors that you would use to choose between these companies.

Explain why each factor is important to the decision.

Question 7

The new system will require hardware that can accept data from one hundred Internet requests each minute.

- a. What test would you perform that would check that the speed of the hardware met the system requirement?
- b. What test would you perform to ensure that data gathered from the Internet was accurate?

TURN OVER

Question 8

It is proposed that some of the current branch consultants be used to answer telephone enquiries about how to connect to the company using modems. They will need to be trained.

Two possible topics for training are

- common problems with modems and what to do to fix them
- technical details of how messages are transmitted along phone lines.

a. Choose **one** of these alternatives and justify your choice.

Two alternative formats for training are

- a self-paced, multimedia, computer-based training on how to search on the Internet
- a half-day session working with an experienced telephone consultant as queries are answered.

b. Choose **one** of these formats and justify your choice as part of the strategy for training the consultants.

Question 9

It has been decided to provide documentation to aid new customers applying for loans. The documentation would explain how to connect to the Internet, how to find the site, and a phone number to call for help with connection. This documentation would be placed on the opening page of the company's web site.

Comment on the appropriateness of the content and format of this documentation. Your answer should include suggestions for improving the delivery of this type of documentation.

Question 10

One of the goals of the system is to increase the number of loan applications that are lodged.

- a. What data would you gather to evaluate the success of the system in achieving this goal? Justify your choice.
- b. When would you gather the data? Justify your choice.