

1995

INFORMATION PROCESSING AND MANAGEMENT

TRIAL CAT 3

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Common Assessment Task 3: Structured Questions

Reading Time: 15 minutes
Writing Time: 2 hours

QUESTION BOOKLET

Structure of Booklet

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

Directions to students

Materials

Question booklet of 12 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 booklet 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 script books inside the back cover of one of the used script books and hand them in. You may retain this question booklet.

Case study

Smiths Books is a chain of three small bookshops situated in the eastern suburbs of Melbourne. The bookshops have established a reputation for having the latest release fiction, biography, travel, art, photography and cook books in stock. The chain has been owned by Mr. Robert Smith since its opening, five years ago. Since that time it has established a reputation for being able to supply good books for its clients. The bookshop is open seven days a week. Each store is run by a Manager. The additional staff employed by each store are:

Store	Casual Employees	Permanent Employees
Hawthorn	3	1
Doncaster	4	2
Box Hill	3	1

The casual staff are employed for several hours a week on evenings and at weekends. The permanent staff are employed mainly during the daytime, although since the bookshop is open Thursday and Friday evenings, they are each rostered on to one of these evenings every week.

As well as providing secure employment for its employees, Smiths Books has the following goals.

- Provide a high level of customer service.
- Have an outstanding selection of books for customers to choose from
- Increase the profit of Smiths Books by 10% each year
- Increase Smiths Books share of the market
- Increase the efficiency, effectiveness and productivity of the organisation
- Maximise capital growth

While many customers purchase books after coming into the shop and browsing, a significant number of customers of the shop have a particular book in mind which they would like to purchase. Under the current system, invoices are prepared manually after the total has been calculated using the shop cash register. A recurring problem is that staff (particularly the casual employees) do not know which books are currently in stock and are often unable to answer customer queries about stock availability without searching the shelves. Problems also have occurred when books which have sold have not been re-ordered from the book publishers. Finally, mistakes have sometimes been made in customer invoices with both pricing of books and the total on the invoice.

Mr. Smith has heard from other booksellers that purchasing a computerised stock control system called *Book Control* seems to have been successful in book selling businesses which have purchased it. *Book Control* has been produced by Mylar Software Pty Ltd of Southport, Queensland who started business several years ago. This application is available in both Windows and Macintosh versions, the two versions being almost identical to operate.

Under the system, computers in each store would be linked via leased line and modem to a central computer at the Hawthorn Branch. Book titles, authors, publisher, purchase price, location of book and sales price are entered into the system when a book comes into the store. Customer queries about book availability can be answered by searching the database under either the author or title of the book. When customers purchase a book or books, the system will write an invoice and then update the book record to indicate that one less book of that title is in stock. Reports are available to indicate to Mr. Smith stock availability, which titles have been sold in a certain time so that these titles can be re-ordered if necessary and which titles have not been selling. Book orders may also be issued via *Book Control* so that Mr. Smith can identify which books have been ordered and which have not been delivered to date.

Book Control has a barcode software module costing \$1600. Books have a barcode printed on them. This would mean purchasing a barcode reader for each computer costing approximately \$450. A printer also needs to be purchased for each store in order to print the invoices.

Mr. Smith is not sure whether or not computerisation is justified. One of the permanent staff is very antagonistic towards computers and Mr Smith is not sure whether the casual staff are worth training in the use of computers as they may not be employed for a long period of time.

Question 1

Mr Smith has decided to consider computerising his operations because of the following problems in the existing manual system:

- it is time-consuming to write invoices
- mistakes have sometimes been made in the invoice due to mistakes in book pricing
- some books have been sitting in stock for years.

For each of the above, outline the **two** main phases of information processing which would be affected by the proposal by Smiths Books to purchase *Book Control*. Justify your choices.

Question 2

In which ways would the proposal for computerisation of Smiths Books, through the implementation of *Book Control*, help it to achieve its organisational goals? Make sure you fully explain your answer.

Question 3

In the event that the bookshops are computerised, what sort of procedures and strategies would be needed to be designed in order to implement the new system with respect to its control and security.

Question 4

What economic and social implications might there be for the existing staff, customers and for management if Smiths Bookshop adopted the proposals outlined in the case study?

Question 5

If the *Book Control* system is purchased, Mr Smith is uncertain whether or not to purchase a commercial laser printer for each store costing \$2000 or a cheaper inkjet printer used in many homes costing only \$300. Because of its low cost, Mr Smith favours purchasing the inkjet printer.

What other factors should Mr Smith consider when deciding to purchase a printer? Which printer should Mr Smith purchase? Make sure that you justify your choice.

Question 6

What additional information might Smiths Bookshop need before going ahead with this proposal to adopt *Book Control*?

Question 7

Describe methods for testing the efficiency, effectiveness and reliability of the hardware and software. How would Smiths Books test the procedures involved in implementing the new system?

Recommend appropriate strategies for dealing with the training needs of Smiths Bookshop.

Question 9

Describe the documentation needed to support *Book Control*.

Explain what factors need to be considered when designing the documentation required to support the implementation of the new system.

Question 10

In the event that *Book Control* was purchased by Smiths Books, how would you evaluate whether or not the implementation of the new system was successful?

**END OF QUESTIONS
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