UNIVERSITY OF SWAZILAND

FACULTY OF COMMERCE

DEPARTMENT OF BUSINESS ADMINISTRATION

SUPPLEMENTARY EXAMINATION 2006

TITLE OF PAPER: MANAGEMENT INFORMATION SYSTEMS I

DEGREE AND YEAR: DCOM III

COURSE NUMBER: BA 311

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS:1. THIS PAPER CONSISTS OF SECTIONS (A) AND (B)

2. THE CASE STUDY SECTION (A) IS COMPULSORY

3. ANSWER ANY THREE QUESTIONS FROM SECTION (B)

Note MARKS WILL BE AWARDED FOR GOOD COMMUNICATION IN ENGLISH AND FOR ORDERLY PRESENTATION OF WORK

THIS EXAMINATION PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

SECTION A

MoviLand, PTY LTD

MoviLand, is a large, Mbabane-based company in the video cassette rental business. Currently, it has an inventory of over 15,000 movies in the 6 branches. The management of MoviLand is currently faced with some problems. To that effect, the company has engaged the services of a consultant, Mr. Ngodwane, to look into their problems, and suggest a solution(s). During his interviews, he has learned about the following checkout, checking, and inventory procedures. The consultant is now working towards finalising his Design for a computerised information system.

A customer joins MoviLand by paying an E25 membership fee. At the time of joining, the customer's information is taken, including a passport number, bank name and account number, and a home address and phone. This information is recorded in a customer card file there is no method in place at present to update this information on a consistent and reliable basis.

After joining the company, a customer receives a membership card he/she can use to check out movies. Movies are kept on the shelves and arranged in alphabetical order. The actual video cassettes are kept in boxes in a library-like storage area behind the reception desk to check out a movie the customer takes a box to the counter and the clerk looks for the movie on the back shelves. Sometimes a movie is not filed correctly and the clerk must search for it. The customer pays a one or two-day rental fee at the time of checkout. the clerk is supposed to ask if the customer has changed his/her address or phone, but there is rarely enough time to do this.

When movies are returned, the clerks try to check on whether they have been brought back on time or if a late charge is due. Sometimes a customer drops a movie off in the stack of returned films without informing the clerk whether it is overdue. By the time overdue movies are discovered by the clerk responsible for re-shelving the movies, it is often too late to locate the customer, some times a clerk tries to reach a customer by phone, but there is very little that can be done to force payment on overdue returns, sometimes renters return movies late but are not assessed for late charges because they drop their movie off in an after-hours collection box and there is no way to substantiate the time and date of a movie's return.

Movies may pile up because clerks do not have enough time to re-shelve them. Sometimes customers want to check out movies they find in the pile/stack of returned movies. In most cases, a customer may not be able to locate the movie if it has not been. re-shelved.

One of the major problems is inventory control. Most of the movie titles that are new releases are out of stock, particularly on weekends when customers want to rent them. Also, any of the slow-moving titles are kept in stock when they should be discontinued.

Management would like to improve their business operations. However, there are some fears that some of the employees might not fully support the implementation of a computerised information system.

a
Identify and briefly explain four 4) information needs that the company has. 8 marks

b
Identify two (2) software development alternatives that might be suitable for MoviLand's information needs and describe at least one advantage and one disadvantage of each alternative. 12 marks

c
If you had been the systems analyst at the very on set, what steps would you have taken to minimize the potential user-resistance to the proposed information system? 12 marks

d
What might the consultant consider in terms of information systems controls to ensure systems efficiency? 8 marks

SECTION B

Answer any three questions from this section

Question 1

a) List and briefly describe the components that might be included in a database management software package. 10 marks

b) List and describe the three (3) traditional database structure models. 10 marks

Question 2

A prominent MIS researcher has observed that "The reason most information systems have failed is that we have ignored organisational behaviour problems in the design and operation of Computer based information systems." Discuss. 20 marks

Question 3

a)   One advantage of the database approach is that it controls redundancy in a database. What are the negative factors associated with controlled redundancy? 4 marks

b)   It is said that the traditional file oriented approach to information systems exhibits lack of data integration

i.   What does this mean? 4 marks
ii.   Give an example to explain your answer. 4 marks

c)   Classify the following as either open systems or closed systems. Give reasons for your answers

        i) Swaziland Property market.
        ii) Manzini Club.
        iii) Dr. Douglas (Campus doctor).
        iv) Manzini choir.
                            8 marks

Question 4

a) What strategies can be used to overcome user resistance to system development projects? 7 marks

b) Describe four (4) ways in which prototyping differs from traditional systems development methodology. 6 marks

c) Suppose you were asked to help design the controls for an information systems. What information would you need? 7 marks

Question 5

Discuss four techniques that can be used to investigate the operation of a current information system, listing three (3) advantages of each technique you have described. 20 marks