UNIVERSITY OF SWAZILAND

FACULTY OF COMMERCE

DEPARTMENT OF BUSINESS ADMINISTRATION

MAIN EXAMINATION 2005

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 SECTIONS (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

The Macmillan manufacturing company has a system development backlog of 52 months. Managers are very anxious to accomplish some information systems development projects and are beginning to seek the help of consultants. The information systems department headed by Richard Price does not want to lose critical projects that should be developed by MIS professionals. Richard also wants to investigate the possibility of using alternative development approaches to accomplish some of the projects. A list of some of Macmillan's projects follows. Use Gremillion and Pyburns framework to determine the best development approach for each project. Traditional development software packages, user development and prototyping are possible development alternatives.

A

A manager in the production planning department wants an information system to help branch managers determine target ending inventory levels for their respective branches distribution centers. The production planners need access to a sales history database for the past 18 months consisting of 350,000 records. Using these data they would determine sales trends for various product lines. The sales analysis information would be used to determine the target ending inventory   10 marks

B

The accounting department needs information systems to maintain records on funded government contracts. The budgets for each contract have to be updated weekly to reflect changes for manpower and equipment.   10 marks

C

The members of the corporate strategic planning department need an information system to enable them to analyse alternative capital budgeting decisions including investment in real estate, new acquisitions and new facilities.   10 marks

D

Senior management proposes developing an international order entry and billing system making it possible to enter orders and to invoice customers from all 12 district offices.
                           10 marks

SECTION B

Question 1

Describe, with the aid of examples, any five tools or techniques commonly used in structured analysis and design. 20 marks

Question 2

a) Two practical tasks in system implementation are testing and file conversion. Describe the stages of testing and how each stage of testing should be carried out.

8 marks

b) Discuss the issues that arise in data conversion when
Moving from a current manual system to a computer system 6 marks

Moving from a current computer system to a new computer system 6 marks

Question 3

a) Briefly define and distinguish between:
i Analytical and heuristic design-making
ii Unstructured, semi-structured and structured decisions 10marks

b) A production supervisor makes routine decisions about production schedules, has input into purchase decision for ingredients and manages line workers.

i Briefly explain why you should deny the production supervisor's request for a decision support system?

ii What changes in the decision making might make a DSS be appropriate?
10marks

Question 4

a) Explain what is meant by negative feedback. Give an example of how this principle could be used in business information systems. 8marks

b) Spreadsheets are often construed and used by managers to help them make tactical decision. Explain why spreadsheets are appropriate for assisting managers to make this type of decision. 6marks

c)   Describe two possible problems that might arise in an organization where end-users are decision makers. Explain why spreadsheets are so appropriate for assisting managers to make this type of decision.   6marks

Question 5

a)   Define the term system and explain the structure of a system   7marks

b)   Define and distinguish between closed and open systems.   7marks

c)   Management support systems are aids to the decision making process. Describe the phases which constitute that process   6marks