UNIVERSITY OF SWAZILAND

FACULTY OF COMMERCE

DEPARTMENT OF BUSINESS ADMINISTRATION

FINAL EXAMINATION PAPER, MAY 2008

TITLE OF PAPER	:	INFORMATION SYSTEMS I
DEGREE AND YEAR	:	DCOM III/IDE
COURSE CODE	:	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 TWO QUESTIONS FROM SECTION B

NOTE: MARKS WILL BE AWARDED FOR GOOD COMMUNICATION IN
ENGLISH AND FOR ORDERLY PRESENTATION OF WORK.

DO NOT OPEN THIS PAPER UNTIL THE INVIGILATOR HAS GRANTED
PERMISSION.

SECTION A

A university admissions information system.

A new information system is being developed within the admissions and financial aid offices of a major university. The system will analyze application data, apply criteria for admissions and financial aid decisions, and generate various reports on applicant characteristics. In addition, the system will generate various letters and documents about admissions and financial aid details to applicants and their parents. The system will enable the university to recruit applicants more effectively, process their financial aid applications more quickly, and ensure their successful matriculation. Up to now, all of these procedures have been handled manually. A senior admissions supervisor, Francine Minor, has meticulously handled each application individually. Francine believes that her personal familiarity with each application enables her to answer questions more effectively as candidates call. She believes that good judgment is as important as the standard admissions criteria in making admissions decisions. The new computer system, she believes, will treat each applicant as a "punched card" and fail to make good admissions decisions based on Judgment and experience, especially in borderline cases.

Another senior administrative supervisor, Malcolm Blake, handles the financial aid decisions. Malcolm feels threatened by the proposed system because it will take away some of the autonomy he has had over financial aid decisions, he feels that a computer system will ignore judgmental factors. Both Francine and Malcolm plan to circumvent the new system in any way they can. They do not plan to support efforts to train the clerical personnel in both the admissions and financial aid offices who will be responsible for keying in data and generating various reports. Dean Robert Walters suspects that the new system may fail because of user resistance and hires you as a consultant.

A. What factors do you think are creating the resistance to the proposed system?

10 marks

B. What strategies could you use to deal with them effectively? 10 marks

C. If you had been the systems analyst at the very outset of the project, what steps would you have taken to minimize potential resistance to the proposed information system? 10 marks

D. Assume the project was finally implemented, what are some of the reasons for program maintenance? Explain the types of maintenance 10 marks

SECTION B

Choose any 2 questions

Question 1

The following activities, time estimates and precedents have been identified for the selection, purchase and implementation of a software package.

A. Activity	precedence	Estimates (days)
B. Define project initiation document		5
C. Define requirements	A	8
D. Define training plan	B	3
E. Issue invitation to tender	B	3
F. Select supplier	D	2
G. Install hardware and software	E	5
H. Training course	C, F	3
I. Enter master file data	G	5
J. Convert operational data	F	9
K. Parallel running	H,I	10

A

Construct a network chart for this project. 8 marks

B
Based on your network chart

i.   What is the elapsed time of the project (in days)   2 marks

ii.   What are critical activities (the critical path) of the project   6 marks

iii.   How many days could activity H overrun without affecting the overall duration of the project? 4 marks

C

What is the difference between systems Investigation and systems analysis? Why is it important to identify and remove errors early in the systems development life cycle? 10 marks

Question 2

A

List some of the implementation problems that might occur at each stage of the systems life cycle. (2 problems for each stage)   15 marks

B

You travel a lot in your role of vice president of sales and carry a laptop containing customer data, budget information, product development plans, and promotion information. What measures should you take to ensure against potential theft of your laptop and its critical data? Mention and explain 5
15 marks

Question 3

A. Discuss distributed databases   20 marks

B. Discuss the success and pitfalls for a data warehouse   10 marks

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MAIN EXAMINATION, MAY 2008

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DEGREE AND YEAR	:	IDE LEVEL IV
COURSE CODE	:	BA 311 – 2
TIME ALLOWED	:	THREE (3) HOURS
INSTRUCTIONS	:	1. THIS PAPER CONSISTS OF SECTIONS (A) AND (B).
		2. THE CASE STUDY SECTION (A) IS COMPULSORY.
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SECTION A

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B. What strategies could you use to deal with them effectively?   10 marks

C. If you had been the systems analyst at the very outset of the project, what steps would you have taken to minimize potential resistance to the proposed information system?   10 marks

D. Assume the project was finally implemented, what are some of the reasons for program maintenance? Explain the types of maintenance   10 marks

SECTION B

Choose any 2 questions

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K. Parallel running	H,I	10

A

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B
Based on your network chart

i.   What is the elapsed time of the project (in days) 2 marks

ii.   What are critical activities (the critical path) of the project 6 marks

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C

What is the difference between systems Investigation and systems analysis? Why is it important to identify and remove errors early in the systems development life cycle? 10 marks

Question 2

A

Why should organisations have a systems development methodology in place before they introduce computer aided software engineering tools? 20 marks

B

You travel a lot in your role of vice president of sales and carry a laptop containing customer data, budget information, product development plans, and promotion information. What measures should you take to ensure against potential theft of you laptop and its critical data? 10 marks

Question 3

A

List some of the implementation problems that might occur at each stage of the systems life cycle

15 marks

B

You have been hired as a project manager to develop a new Web site in the next 6 months for a store that sells music and books online. Describe how project management tools, such as a Gantt chart and PERT might be used. 15 marks