

**UNIVERSITY OF SWAZILAND**  
**FACULTY OF COMMERCE**  
**DEPARTMENT OF BUSINESS ADMINISTRATION**  
**SUPPLEMENTARY EXAMINATION, JULY 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

Wemer Merchandise, inc. is a catalog firm that provides a variety of stock for the home gardener, such as kneeling pads, wind chimes, garden statuary and garden tools. The company sells directly to the home gardener by taking mail and phone orders. Wemer Merchandise purchases the merchandise it resells from other firms both within Africa and internationally. At present, the company's purchase order systems are completely manual and management is considering automating the purchase order system to increase the speed of processing. A copy of the manual purchase order system is shown below.

### Manual purchase order system

Wemer Merchandise, Inc 515 Sagamore Avenue Manzini	No 7923
Date Ship Via Date Wanted Vendor Number terms	

Quantity	Stock Number	Description	Unit price
Purchase Agent			

If the purchase order system is computerized and the fields in the manual purchase orders are used for the computerized purchase order record:

- A. What input controls might be considered for the fields in the purchase order record? 10 marks
- B. What access control might the firm consider for its purchase order records? 10 marks
- C. What additional controls might the firm consider for its purchase order records? 10 marks
- D. Does automation of the purchasing system pose any ethical issues to the company? 10 marks

## SECTION B

### Question 1

A. What is normalization? 4 marks

B. What are the rules for:

1NF, 2NF and 3NF 6 marks

C

Anthony Valencia has been Director of Data Processing for Perry Products for the last ten years. During that time, Valencia has directed the development of many information systems for the various departments and personnel in the company, including the purchasing department, payroll office, accounting department, production, engineering, personnel, and others. He recently attended a seminar on database management systems, and would like to explore the possibility of using database management systems at Perry Products. For that reason, he has asked you to prepare for him a short report on database management systems.

In your report you must state how database management systems will benefit him and what precautions should he be aware of, explaining your reasons. 20 marks

### Question 2

A. How do operational, tactical, and strategic planning information systems differ in their orientation 10 marks

B. Discuss the analytical modelling alternatives in a decision support system and give examples. 20 marks

### Question 3

A. What is biometrics, and how can it be used to protect sensitive data? 7 marks

B. Discuss the issues that arise when moving from a current manual system to a computer system. 7marks

C. Discuss the different types of feasibility that systems development must consider. 16 marks