

**UNIVERSITY OF SWAZILAND**

**FACULTY OF COMMERCE**

**DEPARTMENT OF BUSINESS ADMINISTRATION**

**MAIN EXAMINATION PAPER 2015/2016**

**TITLE OF PAPER: MANAGEMENT INFORMATION SYSTEMS I**

**COURSE CODE: BA215/BA317**

**YEAR OF STUDY: B.COM 2 (FULL TIME), BCOM LEVEL 3(IDE) & DIP COM LEVEL 4 (IDE)**

**TIME ALLOWED: THREE (3) HOURS**

**INSTRUCTIONS:**

- 1. This paper consists of sections A and B.**
- 2. The case study question – 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*****This section is compulsory*****Morgan Electrical Supplies Inc**

Morgan Electrical Supplies Inc. distributes electrical components to the construction industry. Morgan began as a local supplier 15 years ago and has grown rapidly to become a major competitor in the region. As the business grew and the variety of components to be stocked expanded, Morgan acquired a computer and implemented an inventory control system. Other applications such as accounts receivable, accounts payable, payroll and accounts payable, were gradually computerized as each function expanded. The inventory system, due to its operational importance, has been upgraded to an on-line system, while all the other applications are operating in batch mode. Over the years, Morgan has developed or acquired more than 100 application programs and maintains 150 files.

Morgan faces stiff competition from local suppliers throughout its marketing area. At a management meeting, the sales manager complained about the difficulty in obtaining immediate, current information to respond to customer inquiries. Other managers stated that they also had difficulty in obtaining timely data from the system. As a result, the controller engaged a consulting firm to explore the situation. The consultant recommended installing a database management system (DBMS), and Morgan proceeded on this course, employing Sam as the database administrator.

At a recent management meeting, Sam presented an overview of the DBMS. Sam explained that the database approach assumes an organizational, data-oriented viewpoint as it recognizes that a centralized database represents a vital resource. Instead of being assigned to applications, information is more appropriately used and managed for the entire organization. The operating system physically moves data to and from disk storage, while DBMS is the software program that controls the data definition library that specifies the data structures and characteristics. As a result, both the roles of the application programs and query software and the tasks of the application programmers and users are simplified. Under the database approach, the data are available to all users within security guidelines.

***Required:***

- a) Describe the duties of Sam as the database administrator. (limit your answer to four) (4)
- b) Assume that all applications described in the problem except payroll are approved for inclusion within the recommended database. Describe the phases by which the database will be developed, being as specific as the problem statement allows. (15)
- c) Describe two inquiries to which the database can provide prompt answers for the use of each of the following:
  - a. Sales manager (2)
  - b. Construction firm (customer) (2)
  - c. Inventory manager (2)

**SECTION B**

***Answer any three questions from this section***

Question 1

Explain clearly why it is important to link the information systems plan with the organization's strategic plan (25)

Question 2

Discuss the role of information systems in transforming the performance of primary value chain activities. (25)

Question 3

Compare and contrast, under five headings, decision support systems with expert systems. (25)

Question 4

With the help of examples, explain clearly, four types of electronic market systems that an organization such as Swaziland Beverages can use, highlighting the benefits in each case. (25)