# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF APPLIED SCIENCE

# COMPUTER SCIENCE DEPARTMENT MAY EXAMINATIONS 2005

SUBJECT: INFORMATION SYSTEMS FOR MANAGEMENT AND

**BUSINESS** 

CODE: SCS6102

### INSTRUCTION TO CANDIDATES

The question paper consists of section **A** and section **B**Answer the question in section **A** and any three (3) questions in section **B** 

Time: 3 hours

#### Section A

#### **QUESTION ONE**

#### Phumelela Fast Food.

Phumelela Fast Food. a busy restaurant in the city of Bulawayo, is having a problem providing an adequate service to customers during the hectic lunch hour period. Often customers have to wait twenty to thirty minutes to get served, and sometimes items on the menu are not available. The restaurant is a system. The objectives of the restaurant are to provide services at a low cost and to make a profit of 20% of the total sales volumes (much of this profit has been eroded by the hiring of additional part-time workers to handle the busy workload). The components of the restaurant include waitresses, dinning facilities, menu items, a kitchen staff, food supplies, kitchen facilities and a manager. Interactions in the restaurant include ordering, cooking, serving and collecting cash receipts. The manager has asked you to study the components interactions and other aspects of the restaurant to diagonise its problems and to identify a solution.

- a) Develop a plan for conducting your study and explain what activities you would accomplish during each step of your study. [20]
- b) Why is this restaurant identified as a system? [2]
- c) Under which type of an organization does this restaurant fall? [3]

#### Section B

### **QUESTION TWO**

- a) Outline the functions of a manager in an organization and explain how information systems support these functions. [10]
- b) Describe the three management levels paying more attention to the activities and types of information system at each level. [10]
- c) "Every manager must be Information literate": Comment on the statement and explain what information literacy is. [5]

## **QUESTION THREE**

- a) Draw a sketch showing the components of a system. [7]
- b) Explain the purpose of the feedback component in a system and then differentiate between balancing feedback and reinforcing feedback. [8]
- c) Discuss the following terms in relation to a system:
  - i.System entropy.[2]ii.System stress.[2]iii.System change.[2]
- **d)** What are the three elements of an Information System that managers must consider? [4]

## **QUESTION FOUR**

- a) Having more information in a better form than the competitor does help the organization compete effectively. State and explain five threats to an organisation's competitiveness. [10]
- b) Discuss the impact that the installation of an information system has on the organization's political structure? [5]
- c) Compare and contrast the three schools of management i.e. Technical-rational perspective. Behavioral perspective and Cognitive perspective.
   Briefly say how each perspective helps the organization realize its goals.

## · QUESTION FIVE

- a) Outline the stages of a Decision Making process and using a practical example demonstrate how each stage is achieved [15]
- b) Differentiate primary storage from secondary storage. Give two example for each. [5]
- c) Describe a client/server Network that you are familiar with. [5]

## **QUESTION SIX**

- a) Explain the difference between multiprogramming system software a multiprocessing system software. [5]
- b) Discuss the impact of database management systems in an organization [5]
- c) Using specific examples explain the following system Conversion approaches
  - i) Parallel strategy, [5]
    ii) Direct cutover strategy. [5]
    iii) Phased approach. [5]

**END OF QUESTION PAPER** 

GOOD LUCK!