NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF APPLIED SCIENCE
COMPUTER SCIENCE DEPARTMENT
JULY SUPPLEMENTARY EXAMINATIONS 2005

SUBJECT: INFORMATION SYSTEMS FOR MANAGEMENT AND
            BUSINESS
CODE: SCS6102

INSTRUCTION TO CANDIDATES

Answer any five questions.

Time: 3 hours

QUESTION ONE

a)   The budget allocation for the year for a new organisation gives the
      manager the option to develop either Operational Information Systems or
      Strategic Planning Information Systems. If you were to advise the
      manager, which of these would you put in place first and why? Discuss?
                                                                    [10]

b)   The core business of a Computer Science Department is research and
      teaching. What measures should be put in place to turn around the
      Department into a vibrant research and teaching department? Discuss.
                                                                    [10]

QUESTION TWO

a)   You have a selection of network topologies to choose from for a
      supermarket chain, with branches in several cities in Zimbabwe, and with
      the headquarters in Bulawayo. Explain the reasons for your choice of a
      particular topology for this set up.
            [10]

b)   "For a competitive advantage, a company should network its computer
      systems". Is this true? Explain the reasons.   [10]

QUESTION THREE

a) Security of data is a vital component for any organisation. Attacks on networks come in several ways. Name and explain at least 5 modes of network attacks. [10]

b) Describe the different ways in which network attacks can be contained or avoided. [10]

QUESTION FOUR

a) Compare and contrast the benefits and drawbacks of storing and organizing data in a database as opposed to a file system. [10]

b) E-commerce covers many areas. Identify and explain five areas of application of e-commerce. [10]

QUESTION FIVE

a) Explain five examples of the application of Decision Support Systems (DSS) in Computer Science education. [10]

b) Identify and describe five data mining techniques. [10]

QUESTION SIX

a) Give the advantages and disadvantages of the different systems implementation methods. [10]

b) The client-server architecture is one of several software architectures. Describe the different variations of the client-server software architecture. [10]

QUESTION SEVEN

a) There are many different models of e-education that can be adopted by any educational institution. Describe two of these in detail, giving the advantages and disadvantages of each. [10]

b) Your organisation needs to purchase computers for teaching purposes. Write a report to management stating the specification of the computers in terms of size of memory and type, power of the computer and its make.

[10]

END OF QUESTION PAPER