
NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF APPLIED SCIENCE
COMPUTER SCIENCE DEPARTMENT
JUNE EXAMINATIONS 2004

SUBJECT: BUSINESS INFORMATION SYSTEMS
CODE: SCS1203

INSTRUCTION TO CANDIDATES

Answer any five questions.
Each question carries 20 marks
Total marks 100

Time: 3 hours

SECTION A

QUESTION ONE

- a) The basic transformation model comprises input, processing and output. Describe the transformation which may take place in each of the following:-
- i) A financial accounting system [5]
 - ii) A water billing system [5]
- b) Information, in an organization, is required for decision-making at strategic, tactical and operational levels. In each of the situations below, explain briefly what level of decision it is at.
- (i) Withdrawing company cars from all middle managers [1]
 - (ii) Introducing a new bonus scheme [1]
 - (iii) Building a new staff canteen [1]
 - (iv) Freezing any filling of staff vacancies [1]
 - (v) Buying a luxury car for the Chief Executive Officer [1]
 - (vi) Upgrading the word processing software for the Secretary [1]
 - (vii) Purchasing a computerised payroll information system [1]
 - (viii) Promoting the sales clerk to a computer programmer position [1]
 - (ix) Borrowing ten billion dollars from a merchant bank [1]
 - (x) Starting a new project to develop a financial accounting system [1]
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SECTION B

QUESTION TWO

- a) What is Information Systems Planning? [2]
- b) Using the CRITICAL SUCCESS FACTORS METHOD (CSF) identify the information needs of the NUST Computer Science Department. [14]
- c) What are the advantages of the CSF method? [4]

QUESTION THREE

NUST has departments at several sites. NUST Staff conduct research both on campus and at remote stations within the country.

- a) Describe network structure that will support research at NUST. [7]
- b) What network topologies are in place in the structure you have identified? [7]
- c) What communication media is supported in your structure? [6]

QUESTION FOUR

XEROX BANK has branches internationally. The management can take advantages of Inter-Organisational Information Systems for the banks operations and meetings.

- a) What are Inter-organisational Information Systems? [2]
- b) Name and define at least four Inter-organisational Information systems that can be utilized when management want to hold meetings without necessary coming together at one place. [8]
- c) The Internet brings advantages to a business organization. Which are these? Discuss? [10]

QUESTION FIVE

When selecting a computer, it is important that it meets certain minimum specification in terms of hardware and software.

- a) Describe the specifications of a computer that is used by a NUST member of staff who travels around the country delivering training seminars.[5]
- b) What functionalities does the Operating System provide on this computer. [9]
- c) What criteria define the power of a computer? [6]

QUESTION SIX

A Human Resource Management System can fall under either operational or tactical levels depending on its scope of activities.

- a) What are the characteristics of the information systems at each of those levels? [10]
- b) Describe the subsystems of the Human Resource Management system that fall under each of the levels? [10]

QUESTION SEVEN

A medical system for the prognosis and diagnosis of disease can either be classified at an expert system or decision support system.

- a) What characteristics of a decision support systems are identified in the medical diagnosis system? [7]
- b) What are the characteristics of expert systems as identified in a medical diagnosis system? [7]
- c) What are the similarities and differences between decision support and expert systems? [6]

QUESTION EIGHT

For a computer manufacturing plant and using the Value Chain Concept.

- a) Identify IT that could result in the reduction of the cost of value activities for both primary and secondary activities. [10]
- b) Using the framework that assist management to assess the potential effect of IT at industry, firm and strategy levels, show how each of the levels can be transformed by IT for NUST. [10]

END OF QUESTION PAPER



GOOD LUCK!

