

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**FACULTY OF COMMUNICATION AND INFORMATION SCIENCE**  
**DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE**  
**MASTER OF SCIENCE DEGREE IN LIBRARY AND INFORMATION SCIENCE**

**STAGE II SECOND SEMESTER MAY 2010 EXAMINATIONS**

**ILI 5107: MANAGEMENT INFORMATION SYSTEMS**

**TIME: 3 HOURS + 30 MINUTES READING TIME**

**INSTRUCTION TO CANDIDATES**

1. Question number 1 is compulsory.
  2. Answer any other three (3) questions in addition to question no 1.
  3. Each question carries 25 marks.
  4. Give equal time to all questions.
  5. Importance is attached to accuracy, clarity and legible handwriting.
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1. A state University's Development Office raises funds for improving instructional facilities and laboratories at the university. It has uncovered a sensitive problem: The data is out of control.

The Development Office keeps considerable redundant data on past gifts and givers, as well as prospective benefactors. This results in multiple contacts for the same donor—and people don't like to be asked to donate to a single university over and over!

To further complicate matters, the faculty and administrators in most departments conduct their own fund-raising and development campaigns, again resulting in duplication of contact lists.

Contacts with possible benefactors are not well coordinated. Some prospective givers are contacted too often, and others are overlooked. It is currently impossible to generate lists of prospective givers based on specific criteria (e.g., prior history and socioeconomic level), even though data on hundreds of criteria have been collected and stored. Gift histories are nonexistent, which makes it impossible to establish contribution patterns that would help various fund raising campaigns.

- (i) Identify problems that could trigger the development of a Management Information System (MIS) for the State University's Development Office. (8 marks)
  - (ii) Suggest a proposal for the solution of the problems you cited above. (7marks)
  - (iii) Justify requirements for specifications of the proposed solutions. (10 marks)
2. As an information systems' consultant, you have facilitated several 'student services' projects in the Registrar's Office at a local university. The projects were focused primarily on improving manual processes, eliminating bureaucracy and increasing efficiency. The Registrar's Office is initiating a project to replace thirteen (13) legacy computer applications with either an office shelf integrated software package or an in-house built integrated software.

- (i) Advise the Registrar's office on the best course of action and the implications of taking the selected choice to replace the 13 legacy computers applications. (10 marks)
  - (ii) In the spectrum of organisational change, how would rationalisation of procedures, paradigm shift and business reengineering impact on the Registrar's Office? (15 marks)
3. Group decision support systems (DGSS) are popular for dealing with conflict resolutions.
- (i) Discuss the use of GDSS in libraries. (10 marks)
  - (ii) Critique the role of Information Systems in organisational decision making. (15 marks)
4. Discuss the inputs, outputs and activities of each stage of the MIS development life cycle.
- 5(i) With the aid of a practical example, show the interrelationships among TPS, KWS, OAS, MIS, DSS and ESS within the library system. (15 marks)
- 5(ii) Discuss how MIS in a library can be used to gain a competitive edge. (10 marks)
- 6(i) Assess the impact of auditing in the operation of an information system. (10 marks)
- 6(ii) Discuss the contribution of the library and information science profession to ethics in an information society. (15 marks)

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