NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF COMMUNICATION AND INFORMATION SCIENCE DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

BACHELOR OF SCIENCE (HONOURS) DEGREE IN LIBRARY AND INFORMATION SCIENCE

PART II SECOND SEMESTER MAY 2012 EXAMINATIONS

ILI 2201: DATABASE APPLICATIONS IN ARCHIVES, LIBRARIES AND PUBLISHING

TIME: 3 HOURS

Instructions to candidates

- 1. Answer any <u>four</u> questions
- 2. Give equal time to question.
- 3. Each question carries 25 marks.
- 4. Importance is attached to clear presentation of ideas, good expression and legibility of handwriting.
- 1. Discuss the role of a Database Administrator in a library information system.

[25 marks]

- 2. As a database manager for a library of your choice, discuss security threats to the information. [25 marks]
- 3. Critique the notion of distributing a database for a public library within the city, given that the library has branches in every residential area. [25 marks]
- 4. Discuss the challenges associated with the adoption of electronic database systems in libraries. [25 marks]
- 5. Given the attached registration form for the National University of Science and Technology library.
- 5.1 Identify entities and their attributes.

[10 marks]

5.2 Draw an Entity Relationship diagram indicating primary keys, and cardinality for each.

[15 marks]

- 6. Given that the organisation intends to convert the database in question five (5) to an Object Oriented database:
- 6.1 Identify objects and their functions.

[13 marks]

6.2 Briefly discuss the implications of this conversion.

[12 marks]

END OF PAPER