

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 SEPTEMBER 2011 SPECIAL
SUPPLEMENTARY EXAMINATIONS**

**ILI 2201: DATABASE APPLICATIONS IN ARCHIVES,
LIBRARIES AND PUBLISHING**

TIME: 3 HOURS

Instructions to candidates

1. Answer any four (4) questions.
 2. Each question carries 25 marks.
 3. Give equal time to all the questions you choose.
 4. Importance is attached to accuracy, clarity and legibility of handwriting.
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- 1.1 Explain the fundamental features of a database. (10 marks)
- 1.2 Discuss the implications of introducing a database system to an academic library. (15 marks)

- 2.1 What is the purpose of database normalization? (4 marks)
- 2.2 Explain the characteristics of a data entity that is in:
 - 2.2.1 First Normal Form (2 marks)
 - 2.2.2 Second Normal Form (2 marks)
 - 2.2.3 Third Normal Form (2 marks)
- 2.3 With reference to an information centre of your choice, discuss the reasons for opting for an object oriented database instead of a relational database. (15 marks)

3. Discuss the role of a Database Administrator (DBA) in library systems. (25marks)

4. Assess the opportunities and threats to information security in databases that have resulted from the use of Internet in libraries. (25 marks)

5. Explain the various stages of the database life cycle. (25 marks)

6. Evaluate the importance of databases at each level of decision making in an academic library. (25 marks)

END OF PAPER