

**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 I FIRST SEMESTER DECEMBER 2008 EXAMINATIONS

**ILI 5101 ADVANCED INFORMATION TECHNOLOGY APPLICATIONS**

TIME: 3 HOURS + 30 MINUTES READING

**INSTRUCTIONS TO CANDIDATES**

1. Answer any 4 questions.
  2. Importance is attached to accuracy, clarity of expression and legible handwriting.
  3. Each question carries 25 marks.
  4. Give equal time to all questions.
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- 1a. Discuss three types of Internet connections that are applicable to a public library situated at a remote area in Zimbabwe. (12 marks)
- 1b. Suggest and justify the hardware, software, cabling and network devices suitable for each of the Internet connections you cited above. (13 marks)
- 2a. Perform a Risk Analysis of an electronic library Information System of your choice (15 marks)
- 2b. Evaluate the security system of the library mentioned in 2a above. (10 marks)
- 3a. Examine the functions of each of the following layers of the OSI reference Model. (15 marks)
  - i. Application layer
  - ii. Transport layer
  - iii. Physical layer
  - iv. Datalink layer.
  - v. Session layer
- 3b. Discuss the concept of supply chain management in relation to Information centres. (10 marks)
- 4a. Discuss, with justification, issues that must be contained in an organisation's policy document that deals with complaints from the organisation's electronic customers. (15 marks)

4b. Critique the behaviour of Zimbabwean consumers within electronic environments.

(10 marks)

5. Evaluate critical factors that have to be considered when an Information Centre is providing sales and services to the public through a website.

6. Evaluate the use of the Internet for research.

The End