



**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**

**ILI 5108: SPECIALISED INFORMATION SYSTEMS IN AGRICULTURE, HEALTH**

**AND DEVELOPMENT STUDIES**

**First Semester Examination Paper**

**November 2015**

This examination paper consists of 2 pages

**Time Allowed:** 3 hours  
**Total Marks:** 100  
**Special Requirements:** None  
**Examiner's Name:** Dr T Matingwina

**INSTRUCTIONS**

1. Answer any four (4) questions.
2. Give equal time to all questions you choose.
3. Each question carries 25 marks.
4. Importance is attached to clear presentation of ideas, good expression and legibility of handwriting.

**MARK ALLOCATION**

<b>QUESTION</b>	<b>MARKS</b>
1.	<b>25</b>
2.	<b>25</b>
3.	<b>25</b>
4.	<b>25</b>
5.	<b>25</b>
6.	<b>25</b>

1. Zimbabwe is a mineral rich country, but most of its mineral resources have not been exploited. Suggest and analyse a geological information system that can be used to sustainably exploit mineral resources. (25 marks)
  
2. Assess how the following elements influence the effectiveness of an information dissemination system.
  - 2.1 Source (5 marks)
  - 2.2 Content (5 marks)
  - 2.3 Media and channels (5 marks)
  - 2.4 User (5 marks)
  - 2.5 Destination (5 marks)
  
- 3.1 Analyse the different dimensions of information needs. (10 marks)
  
- 3.2 In light of the concept of information needs and behavior change theories, critique the notion that successful dissemination does not entail effective dissemination. (15 marks)
  
- 4.1 Suppose you have been tasked to design an information system to improve information access and sharing amongst rural farmers in a community of your choice in Zimbabwe, discuss the intrinsic characteristics of such a system. (10 marks)
  
- 4.2 With the aid of diagrams, illustrate how the system described in 4.1 would work. (15 marks)
  
5. Assess the strengths and weaknesses of a Health Map in identifying and monitoring epidemics in Zimbabwe. (25 marks)
  
6. Critically examine the Human, Organization and Technology Model (HOT-fit) in the context of evaluating computerised health information systems (25 marks)