



**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**

**Specialised Information Systems in Agriculture, Health and Development Studies**

**ILI 5108**

**First Semester Examination Paper**

**November 2016**

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. In light of the tension that exists between the holistic and reductionist ontological perspectives, justify the approach that you would use in the design and implementation of a National Health Information System. [25 marks]
  2. Considering that information systems have been viewed as the weakest link in Zimbabwe's health sector, justify the need for Geographic Information Systems in improving public health decision making. [25 marks]
  3. The development of specialised systems is often idiosyncratic to organizational internal and external environments. Validate the information system design strategy that is suitable for small to medium enterprises (SMEs) in Zimbabwe. [25 marks]
  4. Propose a theoretical agricultural information system for small-scale farmers in Zimbabwe. In your proposal, identify the key stakeholders of the system, the input, storage, processing, output and feedback mechanisms, and demonstrate the information flows within the system. [25 marks]
  5. Discuss the tension that exists between Critical Success Factors (CSF) and Business Process Re-engineering (BPR) in the design of specialised information systems. [25 marks]
  6. Analyse the application of the following emerging Information and Communications Technologies in the broad area of development studies
- 6.1 Wearable devices [5 marks]
  - 6.2 Mobile technology [5 marks]
  - 6.3 Social Media [5 marks]
  - 6.4 Expert systems [5 marks]
  - 6.5 Semantic web [5 marks]