MASTER OF SCIENCE DEGREE IN LIBRARY AND INFORMATION SCIENCE

STAGE I FIRST SEMESTER NOVEMBER 2010 EXAMINATIONS

ILI 5101: APPLICATION OF INFORMATION TECHNOLOGY TOOLS IN LIBRARIES

TIME: 3 HOURS

Instruction to candidates

- 1. Answer any four (4) questions.
- 2. Each question carries 25 marks.
- 3. Importance is attached to accuracy, clarity of expression and legible handwriting.
- 1. i Discuss the network devices that operate layers 1, 2, and 3 of the OSI reference mode. (15 marks)
 - ii SMTP, FTP, HTTP are some of the common application layer protocols. Discuss the application of these protocols in Library Information Centres. (10 marks)
- 2. Critique the use of cryptography in a library information system of your choice.
- 3. Discuss the social, technological and economic implications of implementing WIFI, WIMAX, and VoiP connections in academic libraries.
- 4. Perform a risk analysis of each of the following e-commerce models, and discuss the requirements for successful implementation of these models.
 - i B2B (5 marks)
 - ii B2C (5 marks)
 - iii G2G (5 marks)
 - iv C2C (5 marks)
 - v G2E (5 marks)
- 5. Analyse the concept of supply chain management with reference to electronic library information systems.
- 6. Your organization is deciding to be a trading partner to Amazon.com
 - i Discuss the implications of such a decision. (7 marks)
 - ii Assess the use of Value Added Networks (VAN) in implementing this decision. (8 marks)
- iii Develop EDI guidelines for this trade relationship. (10 marks)

MASTER OF SCIENCE DEGREE IN LIBRARY AND INFORMATION SCIENCE

STAGE I FIRST SEMESTER DECEMBER 2010 SUPPLEMENTARY EXAMINATIONS

ILI 5101: APPLICATION OF INFORMATION TECHNOLOGY TOOLS IN LIBRARIES

TIME: 3 HOURS

Instruction to candidates

- 1. Answer any four (4) questions.
- 2. Each question carries 25 marks.
- 3. Importance is attached to accuracy, clarity of expression and legible handwriting.
- 1. i Justify the use of JAVA scripts and CSS in web designing.

(10 marks)

ii Discuss the factors that influence the behaviour of consumers within electronic environments.

(15 marks)

2. With reference to a Library Database Software that you have used, discuss the following database properties:

1	Atomicity	(5 marks)
ii	Security	(5 marks)
iii	Concurrency control	(5 marks)
iv	Isolation	(5 marks)
V	Durability	(5 marks)

- 3. Discuss security threats to electronic information within a library setup. As an information manager, what measures would you take to minimise risk associated with these threats
- 4. i Evaluate the use of fiber optic and coaxial cable as transmission media in a networked information systems. (15 marks)
 - ii Discuss factors that can influence your choice of wireless transmission media (10 marks)
- 5. Discuss the barriers to the adoption of Electronic Data Interchange (EDI) by information centres in Zimbabwe. How would you, as an information professional, overcome the barriers you discussed.

6. You are assisting a team that is upgrading a network for a medical school library. There has been an increase in membership, which has caused the network to slow down. The library is housed in a building that contains large offices with wide hallways. In one of the nearby offices, the school has an imaging machine and other devices that emit electromagnetic interference. The budget is limited.

Analyse the network devices you would consider in addressing the concerns of the medical school library.

MASTER OF SCIENCE DEGREE IN LIBRARY AND INFORMATION SCIENCE

STAGE I FIRST SEMESTER NOVEMBER 2010 EXAMINATIONS

ILI 5102: RESEARCH METHODS AND DATA ANALYSIS

TIME: 3 HOURS

Instructions to candidates

- 1. Question number 1 in Section A is compulsory.
- 2. Answer any other three (3) questions from Section B.
- 3. Each question carries 25 marks.
- 4. Importance is attached to accuracy, clarity of expression and legible handwriting.

Section A

1. You have been requested to identify the information needs of visually impaired people in Zimbabwe. Briefly explain with examples the methodology, sampling plan and data collection techniques you would use when undertaking the activity.

Section B

- 2. The differences between qualitative and quantitative research are not merely philosophical. Discuss.
- 3. Quality control entails control of the confounding variables or extraneous factors in a research setting. Describe how you can ensure quality in survey research.
- 4. Identify and justify an example of a research topic that is best studied through a survey than a case study.
- 5. With examples, describe the differences between a Summated Likert scale and a Semantic Differential scale.
- 6i Discuss the similarities and differences of interviewing in a field study and in a survey.(10 marks)
- 6ii A measuring instrument that is not reliable can not be valid, but an instrument can be reliable without being valid. Discuss the statement. (15 marks)

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 2010 SUPPLEMENTARY EXAMINATIONS

ILI 5102: RESEARCH METHODS AND DATA ANALYSIS

TIME: 3 HOURS

Instruction to candidates

- 1. Answer any four (4) questions.
- 2. Each question carries 25 marks.
- 3. Importance is attached to accuracy, clarity of expression and legible handwriting.
- 1. Critique the statement that data reliability and validity in quantitative research is dependent on the research design and quality of instrument, whereas data trustworthiness in qualitative research is dependent on the behaviour of humans in the research setting.
- 2i. "The multiple meaning of words reduces the effectiveness of content analysis as a research design or data gathering tool." Discuss. (15 marks)
- 2ii. Discuss with examples, the two main ways in which content analysis can be used in research.

(10 Marks)

- 3i. Evaluate the importance of the following aspects in a research design:
 - a. Sampling
 b. Data reliability
 c. Data validity
 (5 marks)
 (5 marks)
- 3ii. Discuss the similarities and differences between quota sampling and stratified sampling. (10 marks)
- 4i. According to Thurstone, "whatever exists, exists in some amount and can be measured". Critique this statement in light of the essence of statistics in research. (15 marks)
- 4ii. Identify and justify with examples the nature of data that is best presented using a histogram than a bar graph. (10 marks)
- 5. Justify the importance of literature review in research.
- 6. Suppose Zimbabwe had a prison population of 20 000 inmates consisting of men (50%), women (20%), boys (15%), girls (10%) and children under 5 years whose mothers are serving terms (5%); and you are to supply them with reading materials. Explain with justification how you would undertake the task.

MASTER OF SCIENCE DEGREE IN LIBRARY AND INFORMATION SCIENCE

STAGE I FIRST SEMESTER NOVEMBER 2010 EXAMINATIONS

ILI 5103 CONTEMPORARY ISSUES IN LIBRARY AND INFORMATION MANAGEMENT

TIME: 3HOURS

Instruction to candidates

- 1. Question number 1 in Section A is **compulsory**.
- 2. Answer any other three (3) questions in Section B.
- 3. Each question carries 25 marks.
- 4. Importance is attached to accuracy, clarity of expression and legible handwriting.

Section A

1. Discuss the features of the contemporary society; in the process justifying why it is critical for information professionals to study and be up-to-date with these features.

Section B

- 2. Critique the statement which says "Globalisation on one end brings positive change and on the other hand describes the organized attempt to exploit the poor and less privileged citizens of the world for the benefit of the rich."
- 3i Discuss what the copyright law attempts to protect as well as the freedoms reserved for or available to the public. (15 marks)
- 3ii The copyright law has more demerits than merits to authors or originators of ideas and information managers. Critique this statement. (10 marks)
- 4 Censorship of various forms of expression has existed from time immemorial. With this in mind, discuss the most frequently censored expressions showing the challenges faced during the censorship.
- 5i Assess the major challenges that face information professionals when developing digital library projects which can be described as successful. (15 marks)
- 5ii Discuss the evaluation criteria for digital libraries. (10 marks)
- 6. The aim of information professionals and the hope of scholars has been to amass, in a single library, all resources for solving epistemological or knowledge problems. It is now realised that this aim of self sufficiency is practically impossible or an unreachable aspiration. Discuss the practical solution to the above problem emphasizing its strengths and weaknesses.

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 2010 SUPPLEMENTARY EXAMINATIONS

ILI 5103 CONTEMPORARY ISSUES IN LIBRARY AND INFORMATION MANAGEMENT

TIME: 3HOURS

Instruction to candidates

- 1. Answer any four (4) questions.
- 2. Each question carries 25 marks.
- 3. Importance is attached to accuracy, clarity of expression and legible handwriting.
- 1. Discuss the impact of globalisation on library and information management.
- 2. Critique the notion that networking and resource sharing are the solutions to the challenges faced by Librarians in trying to satisfy user information needs.
- 3i. Discuss the advantages of incorporating new web technologies such as Web 2.0, Library 2.0, etc. (12 marks)
- ii. Critique the view that digital libraries will ultimately replace traditional types of libraries. (13 marks)
- 4. "Censorship and intellectual freedom cannot coexist." Critique this statement justifying their continued existence.
- 5. Discuss the importance of studying contemporary issues in library and information management.
- 6. Assess the rationale of having a copyright law that is universal.

MASTER OF SCIENCE DEGREE IN LIBRARY AND INFORMATION SCIENCE

STAGE II FIRST SEMESTER NOVEMBER 2010 EXAMINATIONS

ILI 5106: INFORMATION POLICY STUDIES

TIME: 3 HOURS

Instruction to candidates

- 1. Answer any four (4) questions.
- 2. Each question carries 25 marks.
- 3. Importance is attached to accuracy, clarity of expression and legible handwriting.
- 1. Discuss the role of information and communication technologies in democratic governance.
- 2. Explain the phrase 'policy integration' and show how this is realised in policy formulation.
- 3. Examine the revival strategies for the Zimbabwe Library Association (ZIMLA) and discuss the factors that may hinder or enhance its proper functioning.
- 4. Discuss the factors that hamper the formulation and review of information policies in Zimbabwe.
- 5. Do you think it is justified for governments to monitor information flows within and outside their borders?
- 6. Discuss the components of a National Information System (NATIS) in line with the needs of farmers in rural Zimbabwe.

MASTER OF SCIENCE DEGREE IN LIBRARY AND INFORMATION SCIENCE

STAGE II FIRST SEMESTER DECEMBER 2010 SUPPLEMENTARY EXAMINATIONS

ILI 5106: INFORMATION POLICY STUDIES

TIME: 3 HOURS

<u>Instruction to candidates</u>

- 1. Answer any four (4) questions
- 2. Each question carries 25 marks.
- 3. Importance is attached to accuracy, clarity of expression and legible handwriting.
- 1. With reference to related theories, justify why information should be controlled or safeguarded.
- 2. Explain any five (5) characteristics of the policy environment in Zimbabwe and show how each has affected information policy generation.
- 3. Discuss the provisions of POTRAZ in line with cellphone usage in Zimbabwe.
- 4. Outline the stages of law making and legislative procedure in Zimbabwe.
- 5. Discuss the process of policy formulation from problem identification to the agenda setting stage.
- 6. Discuss any five (5) policy formulation models and show the one which you think is more appropriate for the Zimbabwean set-up.

MASTER OF SCIENCE DEGREE IN LIBRARY AND INFORMATION SCIENCE

STAGE II FIRST SEMESTER NOVEMBER 2010 EXAMINATIONS

ILI 5108 SPECIALISED INFORMATION SYSTEMS IN AGRICULTURE, HEALTH AND DEVELOPMENT STUDIES

TIME: 3 HOURS

Instruction to candidates

- 1. Answer any four (4) questions.
- 2. Each question carries 25 marks.
- 3. Importance is attached to accuracy, clarity of expression and legible handwriting.
- 1. Discuss how Geographic Information Systems can be used to influence development in a rural area of your choice.
- 2. Discuss the importance of the Soft System Methodology (SSM) in development studies.
- 3. Discuss how expert systems can be used in the health sector.
- 4. Using a model of your choice, discuss how one can evaluate or analyse Zimbabwe's current Health Information System (HIS), explicitly identifying the model.
- 5i. Outline the components of a web-based information system.

(10 marks)

5ii. Discuss how a web-based system can be applied in the agricultural sector.

(15 marks)

6. You have been tasked to design an agricultural information system in your home area. Identify the model you would use to design the system and discuss the steps that you would go through in developing the system.

MASTER OF SCIENCE DEGREE IN LIBRARY AND INFORMATION SCIENCE

STAGE II FIRST SEMESTER DECEMBER 2010 SUPPLEMENTARY EXAMINATIONS

ILI 5108 SPECIALISED INFORMATION SYSTEMS IN AGRICULTURE, HEALTH AND DEVELOPMENT STUDIES

TIME: 3 HOURS

Instruction to candidates

- 1. Answer any four (4) questions.
- 2. Each question carries 25 marks.
- 3. Importance is attached to accuracy, clarity of expression and legible handwriting.
- 1. Compare and contrast the Hard System Methodology (HSM) and the Soft System Methodology (SSM).
- 2. Discuss the importance of Human Activity Systems (HAS) in development studies.
- 3. Discuss the need for innovation systems in agriculture.
- 4. Compare and contrast Media Elite and Medisoft systems.
- 5. Discuss the rationale for introducing web-based information systems in the agricultural sector in Zimbabwe.
- 6i. Describe an expert system.

(5 marks)

6ii. Discuss how expert systems can be applied in the health sector.

(20 marks)