



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATION
2018/2019 ACADEMIC YEAR
THIRD YEAR SECOND SEMESTER**

**SCHOOL OF SCIENCE AND INFORMATION
SCIENCES
DEPARTMENT OF COMPUTING AND
INFORMATION SCIENCES
EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN INFORMATION
SCIENCES**

**COURSE CODE: INS 3222
COURSE TITLE: DIGITAL
PRESERVATION**

**DATE: 29TH APRIL, 2019
4.30PM**

**TIME: 2.30-
4.30PM**

INSTRUCTIONS

ANSWER QUESTION ONE IN SECTION “A” AND ANY OTHER TWO FROM SECTION “B” ILLUSTRATE YOUR ANSWERS WHERE NECESSARY

SECTION “A” COMPULSARY QUESTIONS

QUESTIONS: 1

a.) Briefly define and explain the following terms on digital preservation concepts:

- | | |
|-------------------------|----------------------------|
| a) Context | (2 marks) |
| b) Migration | (2marks) |
| c) Digital Archaeology | (2 marks) |
| d) Emulation | (2 marks) |
| e) Digital preservation | (2 marks) (Total 10 Marks) |

b.) Discus the following information digital preservation concepts as related to records and archival management.

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|---|------------|
| i. Discuss the legal and ethical principles of digital preservation? | (4 marks) |
| ii. Highlight the common security threats on digital preservation strategies? | (4 marks) |
| iii. List the Characteristics of a digital repositories? | (4 marks) |
| iv. Differentiate between vulnerability, mitigating and threat agent? | (4 marks) |
| v. Explain record- keeping metadata? | (4 marks) |
| | (Total 30 |

Marks)

SECTION “B” ANSWER ANY TWO (2) QUESTIONS FROM THIS SECTION

QUESTION: 2

- | | |
|---|------------------|
| a) Briefly explain the role of electronic recordkeeping system in archival management center? | (4 marks) |
| b) List the five golden rules of digital preservation? | (4 marks) |
| c) Discus the role of IT in enhancing digital records management in the modern organizations? | (4 marks) |
| d) Make brief notes on the 4 concepts encountered in digital preservation process? | (4 marks) |
| e) Outline the main challenges encountered in managing electronic and non-electronic records? | Total (20 marks) |
| | (4marks) |

QUESTION: 3

- a.) Archival digital records are created in a wide variety of formats, highlight 5 varieties of created records. **(5 marks)**
- b.) Explain types of threats encountered in digital preservation. **(5 marks)**
- c.) Highlight 10 kind of security measure that can be taken in case of any internal and external threat attack? **(5 marks)**
- d.) Outline 5 procedural methods of authentication involved in preservation of digital records? **(5 marks)**

QUESTION: 4

Continual changes to the original creation of software and hardware, and the rapid obsolescence of digital technologies, have critical consequences on organizations' records. Critically explain the kind of threats and mitigation measures required to mitigate those threats for effective management of electronic records? **(20 marks)**

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