



# **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: 29<sup>TH</sup> APRIL, 2019**

**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.) Discuss the following information digital preservation concepts as related to records and archival management.**

- 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) Discuss 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)

**//END**