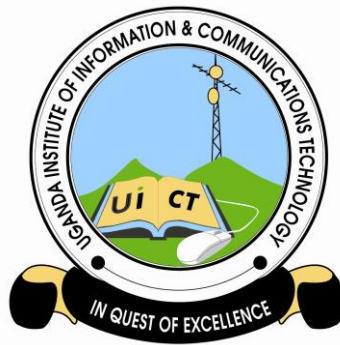




**UGANDA INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY
END OF SEMESTER I EXAMINATION ACADEMIC YEAR 2024/2025**

DEPARTMENT : MANAGEMENT
YEAR OF STUDY : TWO
PROGRAM : REC
COURSE : MANAGEMENT OF ELECTRONIC RECORDS
COURSE CODE : RAM 2104
DATE : SATURSDAY 14TH DECEMBER, 2024
TIME : 9:00-12:00 HOURS
DURATION : 3 HOURS

INSTRUCTIONS:

- i. This paper consists of **TWO** sections, **SECTION A & B**
- ii. Answer **FOUR (4)** Questions in all.
- iii. Section A is **COMPULSORY**, Answer any **THREE** questions from **Section B**
- iv. Credit will be given for the use of relevant examples and illustrations.
- v. Mobile phones are **NOT** allowed in the exam room.
- vi. **DO NOT** write anything on this question paper, rough work should be done in the answer booklet and cancelled through.

SECTION A: (THIS SECTION IS COMPULSORY)

Question One

- a) Define the terms Electronic Records, Database, Steganography and Metadata. (04 Marks)
- b) State four (4) attributes of electronic records. (04 Marks)
- c) Outline five (6) formats used in creating electronic records. (06 Marks)
- d) State five (5) challenges encountered in the creation of Electronic Records. (05 Marks)
- e) List five (5) storage equipment's used in an electronic format. (05 Marks)
- f) Give five (5) advantages of data encryption ERM. (05 Marks)
- g) Give six (6) differences between paper-based records and electronic records (06 Marks)
- h) State five (5) importances of graphics in electronic Records. (05 Marks)

SECTION B: (ATTEMPT ANY 3 QUESTIONS FROM THIS SECTION)

Question Two

The Mystery of the Missing Records

UICT Library has an advanced repository of knowledge. Among its treasures were electronic records detailing library collection i.e e-resources, staff publications and Government publications. These records were maintained on a highly secure system called the **ChronoVault**, overseen by the meticulous librarian and cybersecurity specialist.

One fateful morning, the Librarian discovered that several critical records had disappeared from the system. The ChronoVault's security logs showed an unusual access event at 3:00 a.m. The breach seemed to originate from the library's public computer network—a system deliberately kept separate from the ChronoVault to prevent such occurrences. She assembled a team, including her IT assistant Tony and forensic analyst Robert. Together, they began investigating the breach. They examined access logs, traced the network pathways, and identified a possible vulnerability: an outdated file-sharing protocol left active on the public network. This protocol allowed a malicious actor to inject a script that bridged the public network and the ChronoVault. After days of investigation, they tracked the intrusion to an external server. The Librarian collaborated with law enforcement and retrieved the missing records. The perpetrator was a rogue archivist who intended to sell the stolen records on the black market.

Scenario: UICT Library experienced a breach that resulted in the loss of several critical electronic records. The breach exploited a vulnerability in the library's public network, allowing unauthorized access to its secure system. The records were eventually retrieved through digital forensics and collaboration with law enforcement. As a records Management student;

- a) Discuss the **five** causes of cybercrime within UICT as an Organization. (10 Marks)
- b) Explain **five** cybersecurity measures that could have prevented the breach. (10 Marks)

Question three

The National Archives Department has recently transitioned from a paper-based records management system to an advanced electronic records management system (ERMS). The system is designed to store and manage thousands of government records efficiently. However, an internal review revealed several issues related to metadata like Inconsistent metadata entries across departments, lack of adherence to metadata standards, difficulties in retrieving specific records due to incomplete or missing metadata and concerns about the authenticity and integrity of records due to inadequate metadata tracking. As a newly appointed Records Manager.

- a) Discuss **five** values of managing electronic records Metadata. (10 marks)
- b) Explain **five** types of metadata providing examples relevant to the scenario. (10 marks).

Question Four

A retail company uses a DBMS to manage its inventory and sales data. The system has started to experience performance issues as the volume of data grows. Additionally, the company has difficulty generating accurate sales reports due to inconsistent data entry. As a records Management student.

- a) Explain any **five** reasons for the performance issues in the DBMS. **(10 marks)**
- b) Suggest **five** strategies for improving the performance issues mentioned above. **(10 marks)**

Question Five

A medium-sized manufacturing company, *GlobalTech Fabrics Ltd.*, has been using a manual, file-based system to manage its business operations. The company maintains paper files and spreadsheets to store information about employees, suppliers, inventory, and customer orders. Recently, the company started facing several challenges like retrieving information from paper files and spreadsheets has become time-consuming and error-prone, duplicate and inconsistent data across departments leading to incorrect inventory records and mismatched customer orders, generating reports has become increasingly difficult because of the scattered and unstructured data, unrestricted user access and corrupted or misplacement of files. To address these problems, the company is considering to digitization. In view of the above scenario

- a) Distinguish between manual databases and computerized databases by providing **two** examples for each. **(10 Marks)**
- b) Discuss **eight** advantages of digitizing the records of GlobalTech Fabrics Ltd. **(16 Marks)**

Question Six

A large urban hospital, *Sebbi Medical Centre*, has implemented an electronic records management system (ERMS) to manage its growing volume of patient information. This system stores patient records, including medical histories, prescriptions, lab results, and appointment schedules. However, the hospital has encountered several challenges in recruiting patients records and inconsistencies in the indexing system across departments. As the hospital's Records Manager.

- a) Discuss **five** retrieval techniques Sebbi Medical Center can adopted to minimize the encountered challenges. **(10 Marks)**
- b) Explain **five** importances of a standardized indexing system in the context of Sebbi Medical Center's operations. **(10 marks)**

Question Seven

The National Museum of Heritage and Culture has accumulated a vast collection of electronic records over the years. These records include digitized historical manuscripts, high-resolution images of artifacts, videos of cultural events, and extensive research papers. The museum relies on these records for exhibitions, research collaborations, and public education programs. Recently, the museum faced several challenges with its digital records. As the curator

- a) Explain **five** challenges meant above. **(10 Marks)**
- b) Discuss **five** importance of preserving electronic records for institutions like the National Museum. **(10 Marks)**

****GOOD LUCK****