CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN INFORMATION SCIENCE

BSIS 456: DATABASE CONSTRUCTION AND MANAGEMENT

STREAMS: BSC (IS)   **TIME: 2 HOURS**

DAY/DATE: MONDAY 29/03/2021   **8.30 A.M. – 10.30 A.M.**

INSTRUCTIONS:
- **Answer question ONE and ant other TWO questions.**
- **Do not write on the question paper.**

1. (a) Explain FIVE functions of a database system in an organization.   (10 marks)

    (b) A library database is prone to numerous security threats. Discuss the security threats facing library database.   (10 marks)

    (c) Explain FIVE attributes of a Data Base Management System.   (10 marks)

2. (a) Explain FIVE components of database system.   (10 marks)

    (b) Explain FIVE measures to put in place to ensure security of a database system in an information centre.   (10 marks)

3. (a) Explain FIVE aggregate functions of SQL language.   (10 marks)

    (b) Explain FIVE attributes of a relational model.   (10 marks)

4. (a) Explain FIVE key requirements of a secure database system.   (10 marks)

    (b) Describe FIVE elements of SQL.   (10 marks)

5.   (a)   Explain FIVE measures put in place to control access in a library database system.
(10 marks)

(b)   Explain the meaning of the following terms.   (10 marks)
       (i)   Database

       (ii)   Record

       (iii)   Field

       (iv)   Data warehouse

       (v)   Schema