

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**  
**EXAMINATION FOR THE AWARD OF BACHELOR OF DEGREE OF BACHELOR OF**  
**SCIENCE IN INFORMATION SCIENCE**

**BSIS 455: LIBRARY SYSTEMS ANALYSIS, DESIGN & EVALUATION**

**STREAMS: BSIS Y4S1**  
**HOURS**

**TIME:2**

**DAY/DATE: THURSDAY 19/12/2024**  
**A.M.**

**8.30 A.M. –10.30**

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**INSTRUCTIONS**

1. This examination paper has FIVE (5) questions
2. Candidates are required to attempt QUESTION 1 and ANY OTHER TWO questions
3. No reference materials OF ANY KIND should be carried into the Examination room
4. DO NOT write on the question paper

**Question One ( 30 Marks)**

- a) Analyze the following stages of a system development lifecycle ( 10 Marks)
  - i) Implementation
  - ii) Maintenance
- b) Evaluate TWO types of information systems applicable in a community library (10 Marks)
- c) As the chief librarian, prepare a project feasibility report for your library ABC

(10 Marks).

**Question Two ( 20 Marks)**

- a) Feasibility assessment is a vital step before developing an information system solution in a library, justify (10 Marks)
- b) Analyze the need of prototyping in a library set up (10 Marks)

**Question Three ( 20 Marks)**

- a) Evaluate FIVE managerial factors to consider before adoption of a ready-made system in a public library (10 Marks)
- b) Describe with relevant examples the following components of information systems
  - i) Resources
  - ii) Processes

**Question Four** ( 20 Marks)

- a) Using clear and relevant examples, describe TWO components of data flow diagrams (DFD). (10 Marks)
- b) Analyze FIVE types of personnel involved in system testing. (10 Marks)

**Question Five ( 20 Marks)**

- a) Describe FIVE elements of a project charter as applicable in a university library (10 Marks)
  - b) Analyze the role of information technology representatives in a Joint Application Design (JAD) process . (10 Marks)
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