

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

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

BSIS 457: HUMAN COMPUTER INTERACTION

STREAMS: BSIS

TIME:2 HOURS

DAY/DATE: THURSDAY 13/04/2023

11.30 A.M. –1.30 P.M.

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 material **OF ANY KIND** should be carried into the Examination room.
4. **DO NOT** write on the question paper.

Question One (30 marks)

1. a) Explain the following principles as applied in library system design.
 - i. The principle of user testing (5 marks)
 - ii. The principle of focus (5 marks)
- b) Clearly demonstrate how Voice user interface has been effectively applied in a public library (10 marks)
- c) “Every design of system has psychological effects on the user”. Discuss in the context of a community library (10 marks)

Question Two

- a) Explain FIVE factors to consider during evaluation of effective user interface tools in an information centre (10 marks)
- b) Describe the following styles of user interface interaction in knowledge management centre
 - i. Menu interface style (5 marks)
 - ii. Natural language interface style (5 marks)

Question Three (20 marks)

- a) Describe FIVE features of Chuka University library system that enhance usability by the patrons (10 marks)
- b) Describe TWO key features of an efficient interface building tools (10 marks)

Question Four (20 marks)

- a) Explain FIVE stages of Donald Norman's model of interaction (10 marks)
- b) Describe FIVE task related factors that are applied during analysis and design of a library system (10 marks)

Question Five (20 Marks)

- a) Explain FIVE human factors activities that should be considered when designing and implementing interactive softwares in a library (10 marks)
 - b) Demonstrate the role of task analysis is an information centre (10 marks)
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