

# MASENO UNIVERSITY UNIVERSITY EXAMINATIONS 2016/2017

## FOURTH YEAR FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF EDUCATION AND BACHELOR OF ARTS WITH INFORMATION TECHNOLOGY

## **HOMA-BAY - CAMPUS**

## SCS 416: HUMAN COMPUTER INTERACTION

Date: 2nd December, 2016

Time: 2.00 - 5.00 pm

#### INSTRUCTIONS:

- Answer ALL questions in SECTION A and any TWO questions from SECTION B.
- Write your registration number on all sheets of the answer book used.
- Use a NEW PAGE FOR EVERY QUESTION attempted, and indicate number on the space provided on the page of the answer sheet.

## STOTION A: ANSWER ALL QUESTIONS IN THIS SECTION QUESTION ONE 80 MARKS

- a. Discuss HCI and explain what necessitated the introduction of this study.
- b. Discuss the design principles to be observed when user centered approach is used for interface design.
   10marks
- c. There are THREE main goals of evaluation and TWO main evaluation approaches in judging whether an interface is usable or not. Discuss.

10marks

### SECTION B: ANSWER ANY TWO QUESTIONS IN THIS SECTION Question Two (20 Marks)

- Describe how Interviews can be made effective in gathering information for developing an usable interface.

  10marks
- b. What is Computer Supported Collaborative Work and Groupware? Explain
  how this helps in the design of a user interface. 10marks

#### Question Three (20 Marks)

- a. With reference to Norman's seven principles, explain how you would transform difficult tasks into simple ones. 10marks
- b. Discuss the strengths of Menu Driven interface over other interfaces.

10marks

#### Question Four (20 Marks)

Explain the elements and roles of windowing systems.

10marks

Discuss the strengths and weaknesses of command line interface. 10marks

#### Question Five (20 Marks)

- a. Explain how Decision Support Systems help in organization's decision making process.
  10marks
- b. Discuss the design guidelines of the Three Dimensions Interface. 10marks