



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF BUSINESS & ECONOMICS

UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF BUSINESS

ADMINISTRATION WITH IT

4TH YEAR 1ST SEMESTER 2016/2017 ACADEMIC YEAR

BUSIA LEARNING CENTER

COURSE CODE: SCS 416:

COURSE TITLE: HUMAN COMPUTER INTERACTION

EXAM VENUE: STREAM: (BBA – FINANCE)

DATE: EXAM SESSION:

TIME : 2.00 HOURS

Instructions:

- 1. Answer Question one (Compulsory) and any TWO questions**
- 2. Candidates are advised not to write on the question paper.**

3. Candidates must hand in their answer booklets to the invigilator while in the examination room.

4. Question ONE carries 30 marks and the rest 20 Marks each

QUESTION ONE 30 MARKS

a) Compare and contrast the principles of Visibility and Affordance as used in Human Computer Interaction (4marks)

b) There are a large number of factors which should be considered in HCI principles. State any three of these factors (6marks)

c) Cognition is the process by which we gain knowledge. List any five processes that contribute to cognition (5marks)

d) Describe the stages of Norman's model of Interaction (7marks)

e) Explain the design implications of the seven stage model. (8marks)

QUESTION TWO 20 MARKS

a) The process of interaction design involves four basic activities. Briefly discuss. (4marks)

b) The focal point of Gestalt theory is the idea of "grouping," or how we tend to interpret a visual field or problem in a certain way. Explain briefly the main factors that determine grouping (4marks)

c) List the Usability Engineering Lifecycle phases (6marks)

d) Cognition is the process by which we gain knowledge. Define any four cognitive processes that contribute to cognition (4marks)

QUESTION THREE 20 MARKS

a) Describe five goals of HCI (5marks)

b) Discuss five disciplines that have contributed to HCI (5marks)

c) The human eye has a number of limitations. State any three limitations (3marks)

d) Explain three characteristics of human beings that are relevant to HCI.
(6marks)

QUESTION FOUR 20 MARKS

- a) Discuss five approaches to user support (5marks)
- b) Describe six principles of Jakob Nielsen in usability modeling (6marks)
- c) From the context of HCI, Outline four goals of usability (4marks)
- d) List any four factors that affect the design of a system. (5marks)

QUESTION FIVE 20 MARKS

- a) There are a large number of factors that affect or influence HCI principles. Briefly discuss any five of these factors. (5marks)
- b) State four goals of carrying out evaluation in human computer interaction (4marks)
- c) Explain how the use of colour in computer screen displays can affect user efficiency (6marks)
- d) Direct manipulation interaction style describes systems that have certain features. Enumerate four features of direct manipulation in HCI (5 marks)