



MURANGA UNIVERSITY COLLEGE

(A constituent College of Jomo Kenyatta University of Agriculture & Technology)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2015/2016 ACADEMIC YEAR

**FOURTH YEAR FIRST SEMESTER SUPPLEMENTARY
EXAMINATIONS**

**FOR THE DEGREE
OF
BACHELOR OF BUSINESS INFORMATION TECHNOLOGY**

COURSE CODE: HBT2402

COURSE TITLE: HUMAN COMPUTER INTERACTION

DATE: 29TH JUNE, 2016

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

Answer Question ONE (1) and **any** other TWO Questions

MRUC observes ZERO tolerance to examination irregularities

This Paper Consists of 2 Printed Pages. Please Turn Over. ►

QUESTION ONE [30 marks] -Compulsory

ai) With examples, describe the concept of Metaphors used in computer systems. [4 marks]

ii) Composite metaphors allow the desktop metaphor to include objects which do not exist in the physical office. Explain three components which are included in the composite metaphors. 6 marks

b) Describe the different styles/approaches which can be used to enhance user support in a computer system. 6 marks

c) Cognition is the process by which we gain knowledge. Describe with examples how the processes which contribute to cognition improve human computer interaction in a computer based system.

10 marks

d) Outline the features found in a direct manipulation system. [4 marks]

QUESTION TWO

ai) Describe the three interacting systems in the model human processor (MHP). [6 marks]

ii) Describe the limitations of the model human processor (MHP) approach. [4 marks]

bi) Define the Soft System Methodology (SSM) design methodology of computer systems. [2 marks]

ii) Outline the stages of SSM. [8 marks]

QUESTION THREE

ai) An important concept from cognitive psychology is the model human processor (MHP). Define the model human processor. [2 marks]

ii) Describe the importance of the MHP to HCI activities. [4 marks]

b) Use a mobile money transfer of your choice and describe how the system has enhanced usability. Hint, can use the Shneiderman's Eight Golden Rules of Interface Design. [8 marks]

c) Usability is at the core of Human Computer Systems. Describe six indicators of a system which has a high usability. [6 marks]

QUESTION FOUR

ai) Well-designed direct manipulation systems tend to make the interaction enjoyable for the users. Suggest factors which should be included in a direct manipulation system. [6 marks]

ii) State four examples of direct manipulation systems. [4 marks]

b) State the metaphor(s) used in the following types of applications and in each, suggest the familiar knowledge. [10 marks]

Data Storage
Spreadsheets
The Web
Online shopping
Graphics packages
Media Players