



TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
(BSIT)

BIT 2305: HUMAN COMPUTER INTERACTION

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2013

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions.

Attempt question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

Question One (Compulsory)

- a) Define the term HCI (2 marks)
- b) Outline the THREE components of HCI (3 marks)
- c) Explain roles of the THREE components outlined above (3 marks)
- d) List and explain FOUR disciplines that contribute to HCI development (8 marks)
- e) Explain the following terms in the context:
- (i) Domain (2 marks)
 - (ii) Task (2 marks)
 - (iii) Goal (2 marks)
 - (iv) Intention (2 marks)

f) List THREE user modeling aspects in HCI (3 marks)

g) State at least THREE elements of User Centralized Development (UCD) (3 marks)

Question Two

a) List and explain any FIVE usability principles to guide HCI design (10 marks)

b) Explain FIVE different types of Human computer interfaces giving an advantages and disadvantages of each. (10 marks)

Question Three

a) Briefly define the term Computer Supported Corporative Work (CSCW) (2 marks)

b) CSCW are primarily concerned with supporting a number of users. On the essence of user presence timing describe THREE general classes of classification of CSCW system (6 marks)

c) CSCW systems are divided in terms of geographical nature. Describe FOUR divisions highlighted under geographical nature (12 marks)

Question Four

a) Define the term contextual task analysis or simply put task analysis (2 marks)

b) Outline FOUR specific procedural steps carried out under task analysis (12 marks)

c) Differentiate the difference between interaction designers and usability engineers (6 marks)

Question Five

a) Discuss at least FOUR steps used to develop an interactive system (12 marks)

b) Outline any one methodology that has been used to achieve the above (i) exercise. (8 marks)