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KIRIRI WOMEN'S UNIVERSITY OF SCIENCE AND TECHNOLOGY UNIVERSITY EXAMINATION, 2023/2024 ACADEMIC YEAR SECOND YEAR, FIRST/SECOND SEMESTER EXAMINATION FOR THE BACHELOR OF BUSINESS INFORMATION TECHNOLOGY KBI 2210 – USER INTERFACE DESIGN AND PROGRAMMING

Date: 17TH APRIL 2023 Time: 11:30AM - 1:30PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS **QUESTION ONE (30 MARKS)**

- Define the following terms:
 - Interface i) (3 Marks) ii) Effectiveness (3 Marks) Finite (4 Marks) iii) iv) User (4 Marks) v) Efficiency (4 Marks)
- List 4 goals of human computer interface that designers must adhere to. (4 Marks) b)
- List 4 characteristics of a usable system. c)

(4 Marks) System control and security for a computer based project has resources like hardware, software d) data procedures. Security refers to protecting these elements from accessing in a wrong way i.e. unauthorized way. List five reasons why an interface designer should implement system security and controls. (4 Marks)

QUESTION TWO (20 MARKS)

- Describe the Norman's execution evaluation model in relation to user interface. (10 Marks) a)
- Discuss 5 ergonomics factors that a designer should consider when designing a system. (10 Marks) b)

QUESTION THREE (20 MARKS)

- You are the Information technology manager at Coca Cola Limited. Using 5 examples discuss how the products offered are easy to use and meet the customer's needs. (10 Marks)
- Describe 5 characteristics of a good user interface (10 Marks) b)

QUESTION FOUR (20 MARKS)

- Mutiso is a user interface designer at equity bank. Discuss 5 factors that he should consider when designing the bank's website and ATM system. (10 Marks)
- b) Describe the 3 views that humans use to solve problems (10 Marks)

QUESTION FIVE (20 MARKS)

- Describe 5 interaction styles in relation to use interface (5 Marks) a)
- Define prototyping and explain three benefits of prototyping. (5 Marks) b)
- With an aid of a well labeled diagram explain phased development model, stating two c) advantages and disadvantages of phased development model. (10 Marks)