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**KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY  
UNIVERSITY EXAMINATIONS, 2020/2021 ACADEMIC YEAR  
FOURTH YEAR, FIRST SEMESTER EXAMINATION  
FOR THE DEGREE OF BACHELOR OF SCIENCE  
(COMPUTER SCIENCE)**

**KCS 402 - HUMAN COMPUTER INTERFACE**

Date: 15<sup>th</sup> December, 2020  
Time: 11.30am – 1.30pm

**INSTRUCTIONS TO CANDIDATES**

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

**QUESTION ONE (30 MARKS)**

- a) Define the term Usability. (2 Marks)
- b) Explain three reasons why prototype must be used during user interface design process. (3 Marks)
- c) Explain two important features of computer supported cooperative work systems. (4 Marks)
- d) Explain five consequences of bad user interfaces. (5 Marks)
- e) Briefly explain different presentation controls interface that are purely informational. (4 Marks)
- f) Explain any four reasons why to evaluate interfaces and systems in human-computer interaction. (4 Marks)
- g) Discuss four necessities that must be followed in order to support user-centered design. (8 Marks)

**QUESTION TWO (20 MARKS)**

- a) Discuss how can user interface designers determine whether a user interface will cause problems for users? (10 Marks)
- b) Discuss five disciplines that are considered to build a better user experience. (10 Marks)

**QUESTION THREE (20 MARKS)**

- a) Explain five functions of screen based controls or operable controls as an interface. (10 Marks)
- b) Explain any five central measurable human factors for user interface evaluation in HCI. (10 Marks)

**QUESTION FOUR (20 MARKS)**

- a) State and discuss the four types of prototype in HCI. (8 Marks)
- b) State and explain five commonly used User Interfaces in relation to HCI. (12 Marks)

**QUESTION FIVE (20 MARKS)**

- a) Discuss various varieties of distractions that a web screen can present to the user. (10 Marks)
- b) Discuss five main components that define usability in HCI. (10 Marks)