JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF BUSINESS AND ECONOMICS

UNIVERSITY EXAMINATIONS: 2013/2014

SCS 416: HUMAN COMPUTER INTERACTION

KISUMU LEARNING CENTER

DATE: DECEMBER 2013   **TIME: 2 HOURS**

INSTRUCTIONS:

     i.   **This paper contains five (5) questions.**

     ii.   **Question ONE is Compulsory and any other TWO questions**

     iii.   **Answer the questions on the booklet provided**

     iv.   **Mobile Phones are not allowed in exams room**

Question One (COMPULSORY- 30 Marks)

a) Describe the term paradigm shifts as used in HCI.   [2mks]
b) Explain any three applications of multi-sensory systems in the industry.   [6mks]
c) Evaluation is a central part of user centered system design. Explain four main goals of user interface evaluation   [4mks]
d) Discuss the main architectures of windowing systems.   [6mks]
e) Define the term Metaphor and describe three problems associated with metaphors.[4mks]
f) Differentiate the term interaction mode from interaction style.   [4mks]
g) Describe at least four factors the designer of an interactive system would consider in choosing an interaction style.   [4mks]

Question Two

a) Users have different requirements for support at different times. Describe briefly Six main styles of designing user support.   [6mks]

b) Explain why implementing groupware is more difficult than single-user applications.   [4mks]
c) Explain the importance of understanding the problem space in interaction design.   [2mks]
d) Define the term Conceptual model.   [2mks]
e) Describe Four activity based conceptual models used in the design of interactive computing systems for human use.   [6mks]

Question Three

a) Giving reasons for your answers, explain why it is important to employ a discrete
   architecture while implementing the user interface.   [6mks]
b) Explain the importance of good interface design**.**   [4mks]
c) Differentiate **User Centered design philosophy from Participatory.** [4mks]
d) Briefly describe any Six principles of user centered design.   [6mks]

Question Four

a) Explain the importance of user adapted interface design in the right of unified interface
   development.   [4mks]
b) Discuss **Four** costs associated with poor engineering in the design of interactive systems.

                                                                          [6mks]
c) Describe any **Four** requirements of user support systems.   [4mks]
d) Explain why direct manipulation interfaces are enjoyable.   [6mks]

Question Five

a) Describe briefly **Four** evaluation techniques used to assess the implementation of the
   user interface of groupware systems.   [6mrks]
b) The usability of your application's design is not just a philosophical nicety for your
   consideration. Using suitable examples, explain this statement.   [4mks]
c) Explain the main design issues user support.   [4mks]
d) Explain what an adaptive help system is and describe the issues/ problems associated
   with the systems   [6mks