MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

THIRD YEAR SECOND SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

MAIN CAMPUS

CIT 302: HUMAN COMPUTER INTERACTION

Date: 19th June, 2017   Time: 3.30 - 6.30 pm

INSTRUCTIONS:

- Answer question ONE in SECTION A and any other TWO questions from SECTION B.

Question 1

a. A basic goal of user information systems design is to improve the interaction between users and computers, by making computers more user-friendly and easier to use and also make it convenient for the users to use the technology. More specifically, explain any other five concerns of user information systems design.   [10 Marks]

b. Discuss any three reasons why it is necessary to involve users in information systems design, and explain how to involve a user in the design process.

[10 Marks]

c. State and explain any five reasons why there has been a growth in interest on information systems design.   [10 marks]

SECTION B: {40 MARKS}.

Question 2: {20 Marks}.

a) Describe any five main factors in the development of designs of interactive computer systems 　　　　　　　　　　　　　　　　　　　[10 Marks]

b) Discuss any five main differences between the command driven interfaces and direct manipulation interfaces. 　　　　　　　　　　[10 Marks]

Question 3: {20 Marks}.

a) With examples explain the five types of interaction style, with an example of each. 　　　　　　　　　　　　　　　　　　　　[10marks]

b) What is Heuristic evaluation? Describe any four problems with heuristic evaluation. 　　　　　　　　　　　　　　　　　　　[10 Marks]

Question 4: {20 Marks}.

a) Discuss any five kinds of work environment that speech input might be beneficial. 　　　　　　　　　　　　　　　　　　　　[10 Marks]

b) It is important to have some guidelines when constructing an interface, discuss any five major guidelines commonly used in the design process. 　　　[10 marks]

Question 5: {20 Marks}.

a) Describe the four stages of human information processing model. 　[4 Marks]

b) What does it mean to say that an object has an affordance? 　[3 Marks]

c) Why do you think it necessary for a user to know what is happening on the computer side of an interaction? 　　　　　　　　　　　　[2 Marks]

d) What factors should be considered when choosing an interaction style. 　　　　　　　　　　　　　　　　　　　　　　[3marks]

e) What is the aim of evaluation? Who should use evaluation? 　[4marks]

f) Explain the concepts affordance. 　　　　　　　　　　[2marks]

g) Distinguish between formative and summative evaluation 　[2marks]