UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2014/2015 – 2nd Year Examination – Semester 3

IT3405: User Interface Design
PART 2 - Structured Question Paper

01st March, 2015
(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: --

Important Instructions:

- The duration of the paper is **1 (one) hour**.

- The medium of instruction and questions is English.

- This paper has **3 questions** and **8 pages**.

- **Answer all questions.** All questions **do not** carry equal marks.

- **Write your answers** in English using the space provided **in this question paper**.

- Do not tear off any part of this answer book.

- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.

- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (✗), (e.g. ✗) the numbers of the questions answered.

	Question numbers			
To be completed by the candidate by marking a cross (✗).	1	2	3	
To be completed by the examiners:				

1) (a) What fills the gap between the user and computer? Describe its significance for successful communication between two components. (**10 marks**)

ANSWER IN THIS BOX

(b) Simplification is a method to extend the user interface. How does the simplification affect the user? How do you implement it using the keyboard? (**10 Marks**)

ANSWER IN THIS BOX

(c) Write a brief description about the device proposed by the father of Human-Computer Interaction. (**10 Marks**)

ANSWER IN THIS BOX

2) (a) Explain how the FITTS law could be used to justify time taken to hit a target on the screen. (**10 Marks**)

ANSWER IN THIS BOX

(b) What is the role of sensors in Perceptual computing? Provide an example that demonstrates the role of sensor in a device. (**10 Marks**)

ANSWER IN THIS BOX

(c) Briefly state how a mistake could occur as a human error during the interaction. (**5 Marks**)

ANSWER IN THIS BOX

(d)   List three aspects that describe the role of widgets in WIMP interfaces. (**5 Marks**)

<u>ANSWER IN THIS BOX</u>

3) Consider the following prototype screen design and answer questions below.

ABCBank Online

We are pleased to provide the convenience of banking in the privacy of your home.

Please Enter your Security Information below.

User ID   :

Password   :

SUBMIT   EXIT   HELP

(a) Identify at least two design errors in the above screen design. (**6 Marks**)

ANSWER IN THIS BOX

(b) Describe at least two possible usability issues in this design (**6 Marks**)

ANSWER IN THIS BOX

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(c) Suggest how to improve the redesign of this data entry form (**12 Marks**)

ANSWER IN THIS BOX

(d) | Draw a sketch of redesign interface based on your suggestions. (**16 Marks**)

ANSWER IN THIS BOX

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