



**FINAL**  
Examination Paper

(COVER PAGE)

Session : April 2013

Programme : Diploma In Information And Communication Technology (DICTN)

Course : ICT1107 : INTRODUCTION TO HUMAN COMPUTER INTERACTION

Date of Examination : August 1, 2013

Time : 8:00am – 10:00am Reading Time: Nil

Duration : 2 Hours

Special Instructions :

This paper consists of SIX (6) questions. Answer any FOUR (4) questions in the answer booklet provided. All questions carry equal marks.

Materials permitted : Nil

Materials provided : Nil

Examiner (s) : Ms. Lim Chai Kim, Mahaletchumy Ramakrishnan.

Moderator : Dr. Ang Tan Fong

This paper consists of 4 printed pages, including the cover page.

INTI INTERNATIONAL COLLEGE SUBANG

DIPLOMA IN INFORMATION AND COMMUNICATION TECHNOLOGY PROGRAMME  
(DICTN)

DIPLOMA IN INFORMATION TECHNOLOGY PROGRAMME (DIT/I)  
ICT1107/CSC2117: INTRODUCTION TO HUMAN COMPUTER INTERACTION  
FINAL EXAMINATION: APRIL 2013 SESSION

Instructions: This paper consists of **SIX (6)** questions. Answer any **FOUR (4)** questions in the answer booklet provided. All questions carry equal marks.

**Question 1**

- (a) List **FOUR (4)** aspects of computer system collectively known as usability. (4 marks)
- (b) One of the fundamental principles in Human-Computer Interaction is the principle of “Determining the User Skill Level” which states **THREE (3)** user skill levels. Name and briefly describe the **THREE (3)** user skill levels. (6 marks)
- (c) Give **THREE (3)** design goals for EACH of the user skill level specified in Question 1(b) above. (9 marks)
- (d) List **SIX (6)** potential legal controversial issues that should be taken into consideration during design processes. (6 marks)

**Question 2**

- (a) Describe any **FIVE (5)** elements of computer system that affects the human computer interaction. (10 marks)
- (b) What is the main function of the touch screen? (2 marks)
- (c) Identify any **TWO (2)** advantages and **TWO (2)** disadvantages of touch screen. (8 marks)
- (d) Define the term “recency effect” in the context of short-term memory. (1 mark)
- (e) Draw the diagram to illustrate the short term memory. (4 marks)

**Question 3**

- (a) Define Norman's "Gulf of Execution" and "Gulf of Evaluation" (4 marks)
- (b) Explain **FOUR (4)** information a typical usability test's consent statement should contain. (8 marks)
- (c) Explain **FOUR (4)** factors that affect evaluation plans. (8 marks)
- (d) List **FIVE (5)** "Evaluation During Active Use" methods that can be used to collect feedback from the users for the purpose of improving or refining the system. (5 marks)

**Question 4**

- (a) What is ergonomics and the main importance of it? (4 marks)
- (b) List **FOUR (4)** issues addressed in ergonomic design. Provide an example for each issue. (8 marks)
- (c) List any **FOUR (4)** common interaction styles in HCI. (4 marks)
- (d) List any **FOUR (4)** interaction design basics. (4 marks)
- (e) List **FIVE (5)** devices for virtual reality and 3D interaction in positioning in 3D space. (5 marks)

**Question 5**

- (a) List **SIX (6)** colour guidelines for user interface designers. (6 marks)
- (b) Define "anthropomorphic". List **THREE (3)** examples of anthropomorphic user interface designs. (5 marks)
- (c) Describe **FIVE (5)** mistakes in web page design. (5 marks)
- (d) The software that your company developed is not well received by its users. As a medium-sized software startup, your company does not have the proper organizational design to support usability engineering practices. As the lead developer, suggest **SIX (6)** methods for convincing your manager to allocate new resources to carry out proper usability engineering processes? (9 marks)

**Question 6**

- (a) In the context of human computer interaction define the term 'hyper'. (2 marks)
- (b) What is animation? (2 marks)
- (c) Describe **THREE (3)** importance of animation in interactive systems. (6 marks)
- (d) Describe **FOUR (4)** ways for making navigation easier in computer system design. (8 marks)
- (e) List any **FOUR (4)** issues regarding quality of service of network timing. (2 marks)
- (f) Outline the **FIVE (5)** principles affecting learnability (5 marks)

**-THE END-**

*(ICT1107/CSC2117/F/LimChaiKim&MahaletchumyRamakrishnan/Apr2013)*