Infrastructure University Kuala Lumpur

SUNWAY INT'L BUSINESS SCHOOL

FINAL EXAMINATION
SEPTEMBER/OCTOBER SEMESTER 2019

HUMAN COMPUTER INTERACTION
(CSC 2200)

(TIME: 3 HOURS)

MATRIC NO. :

IC. / PASSPORT NO. :

LECTURER : SUDEEP LAL BAJIMAYA

GENERAL INSTRUCTIONS

1. This question booklet consists of 5 printed pages including this page.
2. Answer **ALL questions** in the ANSWER BOOKLET.
3. **PLEASE DO NOT TURN THIS PAGE AND START THE EXAM UNTIL YOU ARE TOLD TO DO SO.**

INSTRUCTIONS: **TIME:** *3 HOURS*

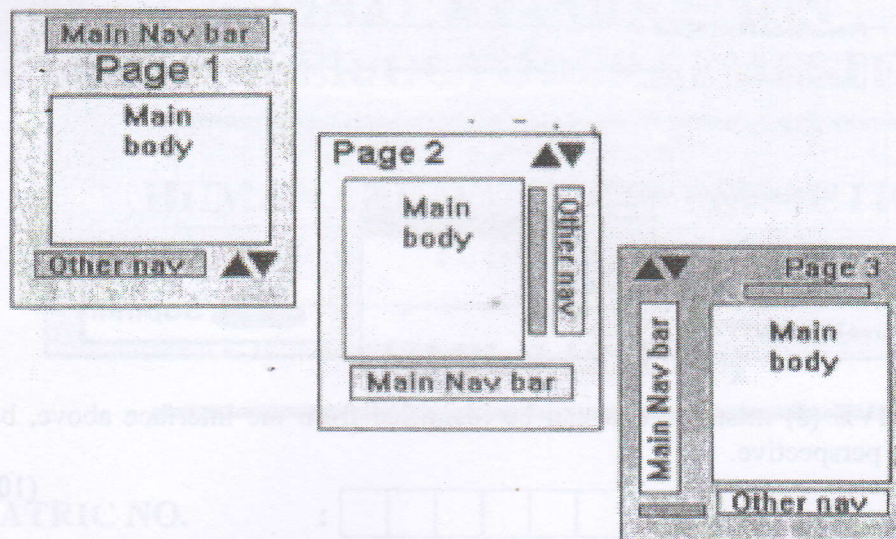**SECTION A**   **(60 MARKS)**

There are **ELEVEN (11)** questions in this section. Answer ALL Questions in the Answer Booklet.

1. Answer the following questions:

   a) Define Human Computer Interaction (HCI).

                                                                      (2 marks)

   b) State **THREE (3)** goals of HCI.

                                                                      (3 marks)

2. List **ANY THREE (3)** human factors that affect how people interact with computer system.

                                                                      (3 marks)

3. Explain Shackel's Model of Usability and its **FOUR (4)** factors.

                                                                      (6 marks)

4. Describe the following data gathering techniques.

   a) Workshops or focus group

                                                                      (3 marks)

   b) Naturalistic Observation

                                                                      (3 marks)

5. Define hierarchical task analysis (HTA).

                                                                      (3 marks)

6. Draw a graphical HTA for any suitable application of your choice.

                                                                      (6 marks)

7. Describe user interface metaphor with an example.

                                                                      (3 marks)

8. Refer to the following scenario:

"It is Saturday morning and Ram plans to vacuum the floor and change bed sheet of his three-storey house"

a) Prepare a Hierarchical task analysis in textual representation for the given scenario.

(8 marks)

b) Describe your plan.

(2 marks)

9. Discuss **ANY TWO (2)** problems that user interface design has in common with traditional software engineering.

(4 marks)

10. Draw a use case diagram for the library system present at your college.

(10 marks)

11. Explain the meaning of what you see is what you get (WYSIWYG).

(4 marks)

SECTION B (40 MARKS)

There are THREE (3) questions in this section. Answer ALL Questions in the Answer Booklet.

1. Refer to the following wireframe interface design.

a) Evaluate the design above and write your critiques.

(6 marks)

b) Illustrate the best way to improve the designs.

(4 marks)

2. State the purpose of wireframe in HCI.

(4 marks)

3. Refer to following figure to answer:

a. Describe **FIVE (5)** mistakes that can be identified from the interface above, based on HCI design perspective.

(10 marks)

b. Briefly explain **FIVE (5)** of "the eight golden rules" of design that have been violated by this interface.

(10 marks)

c. Draw a sketch of improved design and justify your design.

(6 marks)

*** END OF QUESTIONS ***