NATIONAL OPEN UNIVERSITY OF NIGERIA,

PLOT 91, CADASTRAL ZONE, UNIVERSITY VILLAGE, JABI – ABUJA

FACULTY OF SCIENCES

DEPARTMENT OF COMPUTER SCIENCE

2022_2 EXAMINATIONS

COURSE CODE: CIT811

COURSE CREDIT: 3

COURSE TITLE: USER INTERFACE DESIGN AND ERGONOMICS

TIME ALLOWED: $2^{1}/_{2}$ HOURS

INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER THREE (3) QUESTIONS

QUESTION 1

1(a) **Based on your knowledge of user interface design, explain** the different ways ergonomics is used to attain efficiency in interface design **(6 marks)**

1(b) Distinguish between Usability Testing and Usability Engineering **(4 marks)**

1(c) Mention six types of user interfaces **(6 marks)**

1d. Identify and elucidate on any three (3) aspects of ergonomics **(9 marks)**

[Total = 25 marks]

Question 2

2a. Outline any six (6) guidelines of usability to be adhered to during user interface design (6 marks)

2b. **Name and elucidate on any 3 examples of cognitive models (9 marks)**

[Total = 15 marks]

Question 3

3a. Write extensively on the Affective Interaction Design. **(3 marks)**

3b. Identify and describe the 4 stages involved in user interface designs **(12 marks)**

[Total = 15 marks]

Question 4

4a. Explain the notion of graphical user interfaces? **(3 marks)**

4b. Describe four ways ergonomics is used to achieve efficiency in interface design **(4 marks)**

4c. Identify and expound on the 4 major considerations of user centred design **(8 marks)**

[Total = 15 marks]

Question 5

5a. Describe the goal of Seating Ergonomics and Macro ergonomics in User Interface design (6 marks)

5b. Outline any four principles of Graphic design **(4 marks)**

5c. Differentiate between Structural and Interaction elements in GUI design **(5 marks)**

[Total = 15 marks]

QUESTION 6

6a. Elucidate on the concept of Storyboards within the context of interface design. **(3 marks)**

6b. Highlight ten (10) aspects to be considered for good user interface design. **(10 marks)**

6c. State any 2 objectives of HCI **(2 marks)**

[Total = 15 marks]