NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
MARCH/APRIL 2016 EXAMINATION

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: **CIT811**
COURSE TITLE: **User Interface Design and Ergonomics (3 Credits)**

Total mark is 70 and each question carries 14 marks
Answer 5 Questions in 3.00 Hours.

1a What is a User Interface? (4 marks)
1b. List and explain any three (3) types of User Interfaces.(6 marks)
1c. Explain User Interface Modalities and Modes (4 marks)

2a. Explain the term "Ergonomics"? (5 marks)
2b. Differentiate between Efficiency and Ergonomics (6 marks)
2c. Mention three benefits of Ergonomics (3 marks)

3a. Write a short note on each of the following:
  (i)   Icons

  (ii)   Controls (widgets)

  (iii)   Menus

          (2 marks each)
3b. Mention any application areas where 3-dimentional graphics can be used. (4 marks)
3c. List any four (4) stages involved in usability testing (4 marks)

4a What is Prototyping? (5 marks)
4b. List and Explain three different prototyping techniques.(6 marks)
4c. Mention three fidelity types of Prototyping (3 marks)

5a. What is Model–View–Controller (MVC) with examples? (4 marks)
5b. Write short note on the following:
          (i)   Evaluating with the Users

(ii)   Evaluating without the Users

(3 marks each)

5c. Mention any four (4) common programming languages and tools that support the implementation of MVC . (4 marks)

6(a) What is the meaning of the following acronyms?
    (i)   GUI
    (ii)   OIT
    (iii)   WUI
    (iv)   CHI
    (v)   UCD
    (vi)   OOUI
    (vii)   ZUI

6(b) Identify four (4) aspects of ergonomics (4 marks)
6(c) Outline three (3) facts about colour (3 marks)

7(a) Describe the term "Heuristics" (4 marks)
7(b)Explain Menu Selection and list three advantages. (6 marks)
7(c) Outline any four Nielsen and Molich's Heuristics (4 marks)