

NATIONAL OPEN UNIVERSITY OF NIGERIA 91 CADASTRAL ZONE NNAMDI AZIKWE EXPRESSWAY JABI, ABUJA FACULTY OF SCIENCE

Time: 3 Hours

Course Code: CIT 811

Course Title: USER INTERFACE DESIGN AND ERGONOMICS

Course Credit Unit: 3

Instruction: Attempt any FIVE (5) questions in all. Each

question awards 14 marks

QUESTIONS

- 1a. Using automobile as illustration, discuss the significance of user interface (8marks)
- 1b. Explain the two (2) major types of user interface (4marks)
- 1c. Define the term 'mode' within the context of user interface (2marks)
- 2a. List and briefly describe six (6) principles for designing good user interface (12marks)
- 2b. In history, user interface can be divided into three phases, mention the first and second dominant type.

(2marks)

- 3a. Discuss the term HCl and its goals towards user interface design (7 marks)
- 3b. Explain task analysis (7marks)
- 4a. Describe the term "Ergonomics"? (5 marks)
- 4b. list and explain Five (5) facets ergonomics (5 marks)
- 4c. Mention three benefits of Ergonomics (3 marks)
- 4d. what does the acronym ZUI depicts (1mark)

- 5a. Outline two (4) facts about colour (4marks)
 5b. Explain menu selection and list three merits. (6 marks)
 5c. mention 2 demerits of menu selection. (4marks)
 6a. Outline any five (5) Nielsen and Molich's Heuristics (10marks)
 6b. Describe the term 'Heuristics' (4 marks)
- 7a. Define User- Centered design (UCD) (2marks)
- 7b. Describe the UCD model (2marks)

7c. Interactive design attempts to improve the usability and experience of a product, explain the following interactive design methodologies.

(10marks)

- i. Design Research
- ii. Research analysis
- iii. Alternative design and evaluation
- iv. Prototyping and usability testing
- v. Implementation