

FEDERAL UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI-ABUJA
FACULTY OF SCIENCES
DEPARTMENT OF COMPUTER SCIENCE

2023 2 EXAMINATIONS

COURSE CODE : CIT 811
COURSE TITLE : USER INTERFACE DESIGN AND ERGONOMICS
CREDIT UNIT : 3
TIME ALLOWED : 2 ½ HOURS
INSTRUCTION : ANSWER QUESTIONS 1(ONE) AND ANY OTHER FOUR (4)

- 1a) Give two (2) references to the term "User Interface" (2 marks)
b) Using the automobile as an example, explain the significance of the User Interface. (4 marks)
c) Explain the statement "designing a good user interface is an iterative process" (4 marks)
d) Give two definitions of the graphical user interface (4 marks)
e) Briefly explain four (4) kinds of windows in the structural element section of GUI (4 marks)
f) Differentiate between the jobs of a professional practitioner and a researcher in HCI (4 marks)
- 2 a) What is a mode in User Interface? (2 marks)
b) Give a suitable explanation of any three (3) fields in ergonomics (6 marks)
c) What does the term "Understanding users" refer to? (2 marks)
d) Explain the reduced clutter principle (2 marks)
- 3a) Explain the kind of training involved in software design? (4 marks)
b) What is the relationship between ergonomics and efficiency? (2 marks)
c) Justify the purpose of User Centered Design? (6 marks)
4. a) Differentiate between structural elements and interactive elements as understood in GUI (4 marks)
b) In a sequential order, extrapolate the steps involved in interaction design? (6 marks)
c) Explain the concept of heuristic evaluation (2 marks)
5. a) How does HCI draw supporting knowledge from both humans and computer systems? (4 marks)
b) Justify how double buffering addresses the flickering problem? (5 marks)
c) What is participatory design? (3 marks)
- 6a) What is the goal of User Interface Design? (2 marks)
b) Explain Ergonomics with regards to the design of products and services (4 marks)
c) Interpret any three usability evaluation methods (6 marks)