NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWASY, JABI-ABUJA
FACULTY OF SCIENCES
DEPARTMENT OF COMPUTER SCIENCE

2021_2 EXAMINATIONS45678

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)***