NATIONAL OPEN UNIVERSITY OF NIGERIA,

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

FACULTY OF SCIENCES

DEPARTMENT OF COMPUTER SCIENCE

2024_2 EXAMINATION

COURSE CODE: CIT811
COURSE CREDIT: 3
COURSE TITLE: USER INTERFACE DESIGN AND ERGONOMIC
TIME ALLOWED: 3 HOURS
INSTRUCTION: ANSWER QUESTION ONE (1) AND ANY OTHER THREE (3) QUESTIONS

Questions

1(a) Explain the workings of the following user interfaces (i) Graphic user (ii) Web based (iii) command line [6 marks]

1(b) Appraise the concept of visibility and accessibility as main consideration of user centred design (UCD) [8 marks]

1 (c) What are the six (6) questions considered as usability when designing a user interface [6 marks]

1 (d) In cognitive walkthrough, What do you do with the results of the walkthrough? [5 marks]

2(a) Discuss the functionalities of the following specialized window (i) Container (ii) Message [9 marks]

2 (b) Distinguish between process data and bottom-line data [6 marks]

3(a) Establish a relationship between Macroergonomics and User interface development [7 marks]

3(b) Explain (with examples) how the raw input event works [8 marks]

4 (a) Show the differences between each of the following (i) Wire frames and flow diagrams (ii) System implementation and system testing (iii) prototyping and usability testing [6 marks]

4(b) Evaluate the operations of (i) parallel and (ii) GOMS models in the performances of users' tasks [9 marks]

5(a) Analyse Low Fidelity prototype with respect to interface design [7 marks]

5(b) How is the Three-dimensional (3-D) technology impacting on interface design ? [8 marks]

6(a) Demonstrate how you can set up a usability study using the method of Debriefing [6 marks]

6(b) Draw a labelled diagram of the human processor model [9 marks]