



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91 CADASTRAL ZONE, NNAMDI AZIKWE EXPRESSWAY, JABI, ABUJA
FACULTY OF SCIENCES
DEPARTMENT OF COMPUTER SCIENCE
OCTOBER, 2019 EXAMINATIONS

COURSE CODE: CIT353

COURSE TITLE: HUMAN COMPUTER INTERACTION

CREDIT: 2 UNITS

TIME ALLOWED: 2 HOURS

INSTRUCTION: ANSWER QUESTION ONE (1) AND ANY OTHER THREE (3) QUESTIONS

1a) Describe five (5) ways in which interactions between users and computers can be improved.

(5 marks)

b) Define *mental models* (2 marks)

c) Enumerate the characteristics of *mental models*. (4 marks)

d) Outline the measures to be taken by a system designer to minimise the memory load of the user (2 marks)

e) Enumerate factors governing the choice of an appropriate evaluation method for different interactive systems? (5 marks)

f) Discuss the execution and evaluation loop stating the loop's usefulness in the user's participation in interactive systems design. (7 marks)

[25 marks]

2) Write short notes on the following interaction styles:

a) WIMP (8 marks)

b) Three-dimensional interfaces (7 marks)

[15 marks]

3a) Extensively discuss Context Analysis. (5 marks)

b) Briefly describe the following cognitive models

i) Parallel design (5 marks)

ii) Human processor (3 marks)

c) What is meant by 'User Interface technique'? (2 marks)

[15 marks]

- 4a) Enumerate the basic components of Human Computer Interaction (4 marks)
- b) State the stages involved in the *Donald Normans model* (4 marks)
- c) With the aid of illustrative diagram, explain the process involved in the design lifecycle of a typical design pattern (7 marks)
- [15 marks]

5. Briefly describe the principles to be considered while designing a user system interface. Give relevant examples.

[15 marks]