

**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**University Village, 91 Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja**  
**FACULTY OF SCIENCE**  
**DEPARTMENT OF COMPUTER SCIENCE**

**CIT353: Human Computer Interaction**

**Credit Units: 2**

**Instruction:** Answer Question (1) (25marks) and any other three questions each carrying 15 marks  
**Time Allowed:** 2 hrs

- 1a) Explain what is meant by Human Computer Interaction? **(5marks)**
- b) Mention five (5) ways in which the interactions between users and computers can be improved. **(5marks)**
- c) Inventing new techniques and comparing existing techniques using the scientific method will enhance efficient interaction techniques for common computing tasks. Enumerate ways to achieve this. **(5 marks)**
- d) Explain the concept of 'Paradigm of Human Computer Interaction' **(3 marks)**
- e) Discuss the execution and evaluation loop stating the loop's usefulness in the user's participation in interactive systems design. **(7 marks)**
- 2) Write short notes on the following interaction style:
  - a) WIMP **(8 marks)**
  - b) Three-dimensional interfaces **(7 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)**
- 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, describe the process involved in the design lifecycle of a typical design pattern **(7 marks)**
- 5a) Extensively discuss prototyping of interactive System designs bringing out its benefits. **(3marks)**
- b) Briefly discuss user-system interface **(5 marks)**
- c) Briefly state the major problems associated with usability specifications? **(2 marks)**
- 6) Briefly describe the principles to be considered while designing a user system interface. Give relevant examples. **(15 marks)**