NATIONAL OPEN UNIVERSITY OF NIGERIA
University Village, 91 Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja
FACULTY OF SCIENCES
COMPUTER SCIENCE DEPARTMENT ᴄₑₘ
2020 EXAMINATIONS

CIT 353: INTRODUCTION TO HUMAN COMPUTER INTERACTION **Credit:** 2 units
TIME ALLOWED: 2 Hours
INSTRUCTION: Answer Question 1 and any other Three (3) Questions

1(a) Define Moore's law. *(3 marks)*
(b) Justify the validity of Moore's law in the year 2020 using related computer specifications known to you. *(4 marks)*
(c) What are the implications of your response in (1b) on finite speed? *(3 marks)*
(d) Identify the components of the interaction model in human computer interaction. *(3 marks)*
(e) Explain the concept of software engineering. *(5 marks)*
(f) Describe the activities in the software lifecycle. **(7 marks)**

2. (a) What is a pattern in human-computer interaction? *(2 marks)*
(b) List any three (3) characteristics of a pattern. *(4 marks)*
(c) Enumerate 2 ways of identifying aspects of a widget. *(2 marks)*
(d) "Not every computer requires a user interface". Explain the implications of this statement in relation to computer information systems. *(4 marks)*
(e) List any three (3) perceptual principle in display design. *(3 marks)*

3 (a) Explain briefly the following computer terms: (i) Menu (ii) Natural Language (iii) Query Interfaces (iv) Spreadsheets (v) cascading menu *(7½ marks)*
(b) List any five (5) elements of a WIMP interface. *(2½ marks)*
(c) State five critical issues of consideration in menu design. *(5 marks)*

4 ((a) Define design rationale. *(2 marks)*
(b) List three (3) associated benefits of design rationale. *(3 marks)*
(c) Write the syntax for a typical read-evaluation loop the Figure below. (5 marks)
(d) List any five (5) Scheiderman's golden rules of design. *(5 marks)*

5(a) A facial recognition software organization intends to capture a major market segment from it's rival competitor. As an expert in the field of human computer interaction, identify a specific usability evaluation technique required in achieving the objective. Give reasons for your answer. *(6½ marks)*
(b)For a large domain and based on your response in 3(a) above, what knowledge representation technique would you represent the knowledge gathered from prospective users? *(2 marks)*
(c) List three (3) techniques applicable in knowledge representation. *(1½ marks)*

(d) Briefly explain stages in the design lifecycle using the Figure below . *(5 marks)*