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**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**University Village, 91 Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja**

**FACULTY OF SCIENCES**

**APRIL, 2019 EXAMINATIONS**

**COURSE CODE: CIT353**

**COURSE TITLE: Human Computer Interaction**

**CREDIT: 2 Units**

**TIME ALLOWED: 2 Hours**

**INSTRUCTION: Answer Question 1 and any other THREE (3) Questions**

1a) State the main goal of Human Computer Interaction (HCI) ***(1 mark)***

b) List four areas of software development that would be affected by HCI. ***(4 marks)***

c) Give four scientific methods that are used to compare techniques in HCI ***(4 marks)***

d) Enumerate the full meaning of the acronym "CATWOE"? ***(4 marks)***

e) Participatory design is one of the design models in HCI. State its characteristics and ethics. ***(4 marks)***

f) Enumerate any two key benefits of usability test ***(1 mark)***

g) Highlight five characteristics of design patterns in HCI. ***(5 marks)***

h) Briefly explain the terms “Slips” as it relates to HCI.  ***(2 marks)***

2a) What are the design principles formulated to support usability? ***(9 marks)***

b) Enumerate the three terms of Interaction ***(3 marks)***

c) Outline three unresolved issues in participatory design *(****3 marks)***

3a) Describe the following storage text formats:

i) ASCII ***(1 mark)***

 ii) UTF-8 ***(1 mark)***

 iii) RTF ***(1 mark)***

iv) SGML ***(1 mark)***

v) XML ***(1 mark)***

b) Outline the stages of Eight Stage Task Analysis (ESTA). ***(8 marks)***

c) Mention four of the paradigm shifts that precede the innovation of HCI ***(2 marks)***

4a) Enumerate fourcharacteristicsof the *eye gaze interaction****. (4 marks)***

b) What is physiological measurement? Outline three of such methods ***(4 marks)***

c) (i) What is cognitive walkthrough? ***(2 marks)***

 (ii) How is it carried out? ***(3 marks)***

d) State the advantages of evaluation***. (2 marks)***

5a) Discuss the stakeholder focus model **(*7 marks)***

b) Give **two** (2) advantages and **one** (1) challenge arising from the application of video and audio effects in web browsing and hypertext ***(3 marks)***

c) State the various positive and negative issues that have emanated from embodying speech act in a specific system. ***(5 marks)***