NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
MARCH/APRIL 2016 EXAMINATION

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: **CIT353**
COURSE TITLE: **Human Computer Interaction**

TIME ALLOWED: **$2^{1/}_2$ Hours**
INSTRUCTION: Answer any four (4) questions.

QUESTIONS

1 a. Assuming you were employed in an IT firm as a Human-Computer Interaction expert. With the aid of a table, show how you would re-frame the following standards so that they are more suitable for implementing your organisation's projects:

    (i) Feedback
    (ii) Structure
    (iii) Affordance   ) 2 marks each
    (iv) Simplicity
    (V) Tolerance

                                         (2 x 5 = 10 marks)

1b. Enumerate all the design principles proposed by Norman.   (7 marks)

1c. Name the paradigm that represents a symbiosis of the electronic and physical worlds.
                                         ($^{1/}_2$ mark)
                                [Total = $17^{1/}_2$ marks]

2a. Give a concise explanation of the following:
    (i) Customizability
    (ii) Dialogue initiative
    (iii) Responsiveness   ) 2 marks each
    (iv) Substitutivity
    (v) Task migratability
    (vi) Task conformance

                                      (2 x 6 = 12 marks)

2b. Name the five (5) usable senses.   (5 marks)

2c. State the first paradigm in the history of interactive technology. ($^{1/}_2$ mark)

[Total = 17$^{1/}_2$ marks]

3a. Chord keyboards have been observed to have five (5) distinctive features. State these
features. (5 marks)
3b. What is the principle role of a touch-sensitive screen. (2 marks)
3c. Write down 2 merits and 2 demerits of a touch-sensitive screen. (8 marks)
3d. Within the context of Human-Computer Interaction, give the full meaning of the following
acronyms:

    (i)   CRT ($^{1/}_2$ mark)
    (ii)   UIMS (1 mark)
    (iii)   WAP (1 mark)

[Total = 17$^{1/}_2$ marks]

4a. Give a brief description of the following terms associated with speech and sound:
    (i) Syntax
    (ii) Morphemes
    (iii) Earcons   ) 2 marks each
    (iv) Allophones
    (v) Prosody
    (vi) Co-articulation

                        (2 x 6 = 12 marks)

4b. Write down any five (5) merits of the design rationale. (5 marks)
4c. What does the acronym UCD represent in Human-Computer Interaction? ($^{1/}_2$ mark)

[Total = 17$^{1/}_2$ marks]

5a. Write down what the following acronyms represent from the standpoint of Human-Computer
Interaction:
    i.   DVST
    ii.   TCP
    iii.   WIMP   ) 1 mark each
    iv.   WYSIWYG
    v.   HTTP
    vi.   ESTA
    vii.   CATWOE

                        (1 x 7 = 7 marks)

5a. State any five (5) health hints to be observed while using display devices. (10 marks)

5c. Provide a simple term for touch, feel and smell devices. ($^{1/}_2$ mark)

[Total = 17$^{1/}_2$ marks]

6a. Write down the source code of a classic read-evaluation loop for a client application.

(11 marks)

6b. What is the significance of the experimental design principle?   (2 marks)

6c.Give four (4) key reasons why the conceptual architecture is considered beneficial. (4 marks)

6d. Name the paradigm that provided opportunity for personal computing.   ($^{1/}_{2}$ mark)

[Total = 17$^{1/}_{2}$ marks]