



**COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE**

**CSC 303 HUMAN COMPUTER INTERACTION**

**END OF FIRST SEMESTER EXAMINATIONS**

**NOVEMBER/DECEMBER 2019**

**LECTURER: MISS L TEMBANI**

**DURATION: (3 HRS)**

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### ***INSTRUCTIONS***

Answer **ALL QUESTIONS** from **Section A (COMPULSORY)**

Answer any **THREE** questions from **Section B**

All questions carry equal marks (25)



**Section A (compulsory, answer ALL questions)**

**Question One**

- a) Define the following terms
  - i. *interface*
  - ii. *high usability* [ 6 marks]
- b) List and explain *any 3* input devices used for interactive purpose, allowing text entry, drawing and selection from the screen. [ 9 marks]
- c) Explain any 5 principles of Human Computer Interaction. [ 10 marks]

**Section B (answer any three (3) questions)**

**Question Two**

- a) Write brief notes on the following types of memory
  - I) Sensory memory
  - II) Short term memory
  - III) Long term memory [9 marks]
- b) With regard to problem solving briefly describe the following theories
  - I) Gestalt theory [2 marks]
  - II) Problem space theory [2 marks]
- a) Explain the various aspects of Norman's execution evaluation cycle. [12 marks]

**Question Three**

- a) Discuss the role of ergonomics in interface design. [12 marks]
- b) Describe the main components of a WIMP interface. [13 marks]

**Question Four**

- a) Explain Scheiderman's Eight Golden Rules of Interface design. [13 marks]
- b) Describe the four principles of direct manipulation. [12 marks]



**Question Five**

Using any examples of your choice, discuss how one can design a human controlled system that people find useful and usable. [25 marks]

**Question Six**

Briefly describe how HCI can be implemented in computer science, psychology, sociology and industrial design. [25 marks]

**END OF EXAMINATION**