



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE

QUALIFICATION: BACHELOR OF COMPUTER SCIENCE HONOURS (MOBILE DEVELOPMENT)	
QUALIFICATION CODE: 08BCHM	LEVEL: 8
COURSE: Interaction Design and Evaluation	COURSE CODE: IDE820S
DATE: January 2019	PAPER: THEORY
DURATION: 2 Hours	MARKS: 100

SUPPLEMENTARY/SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER (S)	Prof Heike Winschiers-Theophilus
MODERATOR:	Dr Tariq Zaman

THIS EXAMINATION CONSISTS OF 3 PAGES

(Including this front page)

INSTRUCTIONS

1. Answer all questions in the answer book provided.
2. When answering you should be guided by the allocation of marks for each question.
3. All things that should not be marked, e.g. any 'rough work', have to be crossed out unambiguously.
4. There are no books, notes or any other additional material allowed for this examination.
5. Read the whole question before answering. Later parts of the same question might be dependent on your answer to earlier parts.

1) More and more elderly people are sent to old age homes rather than being taken care of at home like in the old days. Many elderly people feel lonely, disengaged from society while the young people no longer engage with the elderly and their wisdom. As a designer, you are tasked to create technologies to bridge the generational gap.

- a) Suggest different technologies incorporating interactive techniques that could be implemented to obtain intergenerational engagement with each other in a meaningful manner creating a worthwhile user experience for both sides. [14]
- b) Suggest values of intergenerational engagements that you could incorporate in your design. [10]
- c) Describe in detail how you would run evaluations for the technology you have suggested in Question 1 a above. [10]

2) *“Usability is the base level of the user experience and without usability it is difficult to create a worthwhile user experience; however, without desirability it is unlikely that the user experience will leave a lasting mark on the user”* – Interaction Design Foundation

A common question in the HCI field today is, what is usability compared to desirability? Explain the above quoted statement and its consequences for design and use of technologies. Give examples. [10]

3) A particular strand of HCI and Interaction Design research has studied how visitors can be involved as active protagonists and/or contributors of interactive exhibitions and art installations. Suggest possible ways in which visitors could be involved, and how it could/would affect the exhibitions popularity as well as intended reflections and behaviour changes if the installations address socio-political issues. [12]

4) *“The opacity of back-end information exchange. What’s often called the data curtain veils the circulation of data in uncertainty. Where is your data stored? Who has access, whether openly or through secretive (but legal) back doors? Do managers share your beliefs about what they can or should do with it?”* - Elizabeth Goodman

With the introduction of new technologies with data collection focuses into all industries, a new concern is raised on ethics in design. Considering the extract above, explain the importance of design ethics and how it impacts the circulation of data collected by technology vendors. [12]

5) How is the power of perception exploited through the use of Affordances in user interface design? [10]

6) *“Participatory design (originally co-operative design, now often co-design) is an approach to design attempting to actively involve all stakeholders (e.g. employees, partners, customers, citizens, end users) in the design process to help ensure the result meets their needs and is usable.”*

Considering the definition above outline the benefits of co-design in comparison to user-centric approaches, and how could this approach affect your design process when designing for the well-being of citizens. [10]

7) Nardi in his article on “designing for the future – but which one” elaborates on four fundamentally different approaches to future design, such as the steampunk, multi-life span, collapse computing and speculative design. Shortly explain their main characteristics and motivate which approach you would use if you had to design for social just society of tomorrow. [12]

[End of the Paper]