

# UNIVERSITY of LIMERICK OLLSCOIL LUIMNIGH

#### COLLEGE of INFORMATICS and ELECTRONICS

Academic Year	2005/2006	Semester:	Autumn
			Repeats
<b>Module Title</b>	Human-Computer Interaction	<b>Module Code</b>	CS4826
<b>Duration of exam</b>	2 hours	% of total	60
Lecturer	Michael Cooke	Marks	100

#### Instructions to Candidates.

- Attempt any four questions
- All questions carry equal marks
- Q1 Discuss with examples why it is necessary to understand human cognitive strengths and limitations for the purpose of interface design. In your answer make clear reference to your knowledge of human memory, attention and perception. (25 marks)
- Q2 Do parts a) & b)
  - a) Discuss the importance of low fidelity prototyping in the early stages of the design process for a novel interactive installation or product. (15 marks)

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- b) In the participatory prototyping process what are the relative roles of the user and designer? (10 marks)
- Q3 Explain with examples how Norman's principles for designing usability apply to graphical user interface design. (25 marks)

## Q4 Do parts a) & b)

a) What are the five main standard requirements for HCI design? (10 marks)

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b) Discuss the main similarities and differences between Contextual Inquiry and Ethnography as requirements gathering methods. (15 marks

### Q5 Do parts a) & b)

a) What is the difference between formative and summative evaluation? (10 marks)

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- b) Briefly discuss the relative roles of qualitative and quantitative data in usability evaluation.
- Q6 Cultural Historical Activity theory and Distributed Cognition have emerged as important frameworks for understanding and designing for CSCW settings and applications. For both of these frameworks give a brief outline of their important characteristics and give a brief discussion of how they help us to understand the role of technology in peoples' working lives. (25 marks)