

One and a half hours

The exam will be taken on line.

This paper version is made available as a backup

In this event, only MCQ answers written in the boxes on the exam paper will be marked. All other answers should be written in a separate answer book.

**UNIVERSITY OF MANCHESTER
SCHOOL OF COMPUTER SCIENCE**

User Experience

Date: Wednesday 25th May 2016

Time: 14:00 - 15:30

Answer ALL Questions from both Section A and Section B

Blackboard does not have the functionality to allow you to draw on-line diagrams, therefore please use the answerbook provided to draw any diagrams you wish to add.

This is a CLOSED book examination

The use of electronic calculators is permitted provided they are not programmable and do not store text

[PTO]

Section A

This section is multiple choice. Answer ALL questions from this section.
Write your answer directly into the box provided for each question.

a) Which are four principles of Emotional design? (Knowledge) (1 mark)

- A. Personality, Ego-ness, Oneness, Flow;
- B. Flow, Quality, Learnability, Visualness;
- C. Aesthetics, Oneness, Personality, King Principle;
- D. Quality, Aesthetics, Flow, Pleasantness;
- E. Satisfaction, Personality, Openness, Oneness.

b) How does UX relate to previous Human Factors work? (Comprehension) (1 mark)

- A. They aren't related;
- B. UX is mostly about product design;
- C. UX adds emotion and fun to mainstream HCI;
- D. UX is mostly about interface engineering;
- E. UX is just another name for HCI.

c) Given the need to rapidly create an interface prototype for a specific user need, which software design methodology would you use? (Application) (1 mark)

- A. Cowboy;
- B. Iterative;
- C. Waterfall;
- D. Agile;
- E. Spiral.

d) What does Affective Computing mean? (Knowledge)

(1 mark)

- A. Understanding emotions;
- B. Enabling computers to recognise, express, and have emotions;
- C. We can add emotions at design time;
- D. Makes computing more efficient;
- E. Makes computing more effective.

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e) Which list below contains a condition NOT normally associated with 'Combinatorial Impairment'? (Comprehension)

(1 mark)

- A. Sight, Hearing, Physical Coordination;
- B. Hearing, Physical Coordination, Ageing;
- C. Physical Coordination, Sight, Cognition;
- D. Sight, Cognition, Physical Coordination;
- E. Cognition, Situational Impairment, Hearing.

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f) Why is conforming to scientific principles key to good ethical designs? (Application)

(1 mark)

- A. If the science is bad the experiment will have been performed for nothing;
- B. Science is ethical;
- C. Scientific principles ensure good ethics;
- D. Science and ethics are the same;
- E. Ethical design is a scientific principle.

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g) What are the four main principles of effective design (Accessibility)? (Knowledge) (1 mark)

- A. Openness, Perceivability, Operability, Robustness;
- B. Openness, Perceivability, Operability, Understandability;
- C. Perceivability, Operability, Understandability, Robustness;
- D. Learnability, Perceivability, Operability, Understandability;
- E. Flexibility, Perceivability, Operability, Robustness.

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h) What are the 4 aspects on which the principles of Affective Experience are built (hint - NOT the Principles themselves)? (Comprehension) (1 mark)

- A. Reflective, Aesthetic, Objective, Visceral;
- B. Reflective, Aesthetic, Subjective, Temporal;
- C. Reflective, Aesthetic, Artistic Narrative, Visceral;
- D. Reflective, Temporal, Artistic Narrative, Visceral;
- E. Reflective, Generous, Artistic Narrative, Visceral.

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i) Which are the three principles of Engaging design? (Knowledge) (1 mark)

- A. Fun, Progression, Play;
- B. Social Dynamics, Progression, Play;
- C. Social Dynamics, Progression, Enjoyment;
- D. Enjoyment, Progression, Play;
- E. Enjoyment, Fun, Play.

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j) What are four key principles of ethical research on human participants? (Knowledge)
(1 mark)

- A. Benefits, Openness, Competence, Justice;
- B. Competence, Integrity, Science, Respect;
- C. Trust, Responsibility, Integrity, Openness;
- D. Utility, Integrity, Science, Respect;
- E. Openness, Integrity, Science, Respect.

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Section B

Answer ALL questions from this section.

1. What are two key problems with laboratory based work when evaluating User Experience? Include each problem and a one sentence description for each to gain full marks (Knowledge) (2 marks)

2. What are qualitative and quantitative methods, and how do they differ? Include a one sentence description for each, along with a short description of how they differ to gain full marks (Comprehension) (2 marks)

3. Given the task of designing a Sales support system for a large car component supplier, how can you enhance the users' (in this case Sales People) perception of fun? (Application) (4 marks)

4. What are the eight key ethical principles (give a brief rationale for each)? To get full marks you should demonstrate substantive knowledge of the topic with in-depth analysis. You may want to use examples (and diagrams if appropriate) to help your analysis (Analysis) (4 marks)

5. How do Aesthetics and Visual Complexity relate to each other? To get full marks you should demonstrate substantive knowledge of the question and substantive ability to synthesise information learnt in another part of the unit. You may want to use examples (and diagrams if appropriate) to help your analysis (Synthesis) (4 marks)

6. What is your view regarding 'Combinatorial Impairment'?

In around 250 words, discuss this in terms of the topics surrounding User Experience.

You should interpret the question, add your insight (using experience created from your UX/CS training), and produce a 'mash-up' of the two focusing on aspects you think are important, rationalising why, and linking it to other work you have read, work you have done or seen, prior knowledge, or real world experience. Apply a knowledge of information not explicitly taught in the unit. Detail any use of formal/informal sources your ideas are based on (these can be formal such as [Law, 2009] or informal such as 'recent news article on BBC detailing xyz'). You should include argument, ideas, opinions and thoughts and show a critical analysis or secondary interpretation.

I understand that it can be difficult to not just produce a summary (but a summary is often never required). Think to yourself, what do I bring to this 250 words, could anyone have created the 250 words without your training and insight? If the answer to the last question is 'yes' then you will lose marks; instead change your answer by adding your insight based on your expertise. To get full marks you should demonstrate the ability to apply a knowledge of information not explicitly taught in the unit. You may want to use examples (and diagrams if appropriate) (Creativity) (4 marks)