

UNIVERSITY OF LONDON

CO3348 ZA

BSc Examination

**COMPUTING AND INFORMATION SYSTEMS, CREATIVE
COMPUTING and COMBINED DEGREE SCHEME**

Interaction Design

Date and Time: Wednesday 11 May 2016 : 10.00 – 12.15

Duration: 2 hours 15 minutes

There are FIVE questions in this paper. Candidates should answer **THREE** questions. All questions carry equal marks and full marks can be obtained for complete answers to **THREE** questions. The marks for each part of a question are indicated at the end of the part in [.] brackets.

Only your first **THREE** answers, in the order that they appear in your answer book, will be marked.

There are 75 marks available on this paper.

No calculators should be used.

Question 1

Design scenario

A company is developing a portable memory assistant, intended to help older people who have a poor memory. Assume that you are required to design both the interface and physical components of this device.

- a. What factors might you consider when designing such a device and its interface, given the specified user base? [7]
- b. How would you investigate and test the user requirements? [8]
- c. Draw your design and prototype sketches for the memory assistant. [10]

Question 2

Design practices / evaluation

- a. Describe **three** techniques that you would use to elicit user requirements for an e-commerce site selling customisable t-shirts to the public. [6]
- b. Which different techniques would you select if this website instead allowed users to interact with the site using a smartphone? [6]
- c. Which one of these **two** modalities (website or smartphone) would you recommend as being the most suitable, and why? Justify your answer. [3]
- d. How would you carry out a summative evaluation to assess the usability of a final implementation of this site? Detail both:
 - (i) the original e-commerce website
 - (ii) the smartphone version. [10]

Question 3

Essay

Describe, with suitable examples, what you understand by the concepts of 'Serious Games' and 'Edutainment'. [25]

Question 4

Design practices

You are hired as an HCI expert to undertake the design of the user interface for a touchscreen kiosk situated in the foyer of a local hospital and displaying hospital information for patients and carers. In the course of this task, you need to obtain user requirements from a group of users and test the design with this group.

- a. Describe the criteria you will use to select your user group. [3]
- b. You have a choice between **two** methods to obtain the initial user requirements: focus groups or postal questionnaires. Compare these methods, describing the advantages and disadvantages of **each** in the above scenario. [6]
- c. Describe the advantages and disadvantages of using icons in this user interface. [6]
- d. Sketch some of the icons and screens you might use to test a prototype user interface with your user group. [10]

Question 5

Design scenario

Assume you have to design the interface to a mobile application which allows booking of gym classes and sessions in the local sports centre.

- a. Develop **two** design scenarios, clearly identifying potential users and possible tasks. [10]
- b. Show prototype sketches for the proposed interface. [8]
- c. Define a test plan explaining fully how you would carry out a usability evaluation of your design. [7]

END OF PAPER