

BCS THE CHARTERED INSTITUTE FOR IT

**BCS HIGHER EDUCATION QUALIFICATIONS
BCS Level 5 Diploma in IT**

USER EXPERIENCE

Friday 7th October 2022 – Afternoon

Answer **any** FOUR questions out of SIX. All questions carry equal marks.

Time: TWO hours.

Answer any **Section A** questions you attempt in **Answer Book A**

Answer any **Section B** questions you attempt in **Answer Book B**

The marks given in brackets are **indicative** of the weight given to each part of the question.

Calculators are **NOT** allowed in this examination.

Section A
Answer Section A questions in Answer Book A

A1.

- a) Card sorting is a popular UX research technique. There are two main types i.e. open card sorting and closed card sorting. Explain the difference between these two types.
(5 marks)
- b) Explain briefly at which stage during the design of a website you may consider using a card sorting technique.
(5 marks)
- c) Why is it important that a UX Designer knows the user's mental model when designing an interface? How may card sorting help this?
(8 marks)
- d) Evaluation is integral to the UX design process. Explain why we evaluate and when evaluation takes place.
(7 marks)

A2.

- a) Explain what we mean when we say we need to 'design for inclusion'.
(8 marks)
- b) You are working as a UX professional in an international company, and you need to consider the website regarding localisation. Provide **THREE** examples of localisation (in relation to the website).
(9 marks)
- c) Your team is working on an educational application that could be used via a laptop or mobile device for young adults to learn about the foundations of digital marketing. Your team needs to take into consideration accessibility. Explain what we mean by accessibility and making a system or product accessible.
(8 marks)

A3.

- a)** You are in a team to develop an innovative wearable device that allows continuous glucose monitoring for a person with diabetes to manage their blood sugar more efficiently.

You are collecting data about the user needs, requirements and context of use.

Discuss **TWO** appropriate data gathering techniques and explain how you would use these techniques.

(Assume that you are at the beginning of the development of the device and that you have sufficient time and resources to use any of the available techniques).

(10 marks)

- b)** You are a UX professional, involved in a project that explores ways to use mobile environments (including wearable navigation devices) for visitors to the Science Museum in London. You need to understand as much as possible about the visitors to the Science Museum. Discuss the data gathering techniques you would choose and why.

(6 marks)

- c)** You are to develop a mobile device and an application for people who go running. How would you go about understanding the requirements? What research would you do and how would you do it?

(9 marks)

[Turn Over]

Section B
Answer Section B questions in Answer Book B

- B4.**
- a) 'Flexibility' and 'learnability' are good design principles. Explain briefly using an example why each is important in designing user interfaces. **(10 marks)**
 - b) Explain, using examples, how you would design an interface to promote recognition rather than recall. **(8 marks)**
 - c) One of Shneiderman's Golden Rules/Principles states that 'Design dialogs to yield closure'. Provide an example of how this may be relevant in implementing a website. **(7 marks)**
- B5.**
- a) You are a UX designer working on a new interface for an online retail system. The client wants a complete redesign of the website. Outline to your manager **FOUR** advantages and **FOUR** disadvantages of:
 - i) low fidelity prototypes
 - ii) high-fidelity prototypes.**(16 marks)**
 - b) You are in a team evaluating the redesign of a website. Explain to your manager the main difference between conducting a Heuristic Evaluation and User Testing. **(9 marks)**

B6.

- a) The use of Artificial Intelligence (AI) can improve the User Experience (UX). However, some people are sceptical. Discuss briefly whether there are any issues and/or dangers that we should be aware of if AI becomes more prevalent in UX. **(8 marks)**
- b) Designers are developing multimedia experiences using a variety of modalities including sound, combined in novel ways to create truly multimodal experiences. Sound is also becoming an important part of interface design in mixed reality. Discuss **FOUR** advantages of using sound at the user interface. **(8 marks)**
- c) Briefly explain, using an example for each, the **THREE** Gestalt Principles/Laws of human perception. **(9 marks)**

End of Examination