

BCS THE CHARTERED INSTITUTE FOR IT

BCS HIGHER EDUCATION QUALIFICATIONS
BCS Level 5 Diploma in IT

USER EXPERIENCE

Friday 6th October 2023 - 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) After a user testing session, you are designing a questionnaire to use with potential users of an app that your team is currently developing.

Your team has come up with the following questions for you to include in the questionnaire:

- Question 1: "Would you rather use the old version or this improved version of the app?"
- Question 2: "How would you normally perform this task, without this app?"
- Question 3: "How easy was it to find the pricing page?"
- Question 4: "Did you find this feature frustrating to use?"
- Question 5 "What did you expect would happen when you pressed that button?"

Although you are grateful for their help, you are concerned that some of these questions may lead to user responses that are not particularly true or helpful. Briefly explain to your team whether each of these questions is appropriate to be included in the questionnaire or not. Justify your answers.

(20 marks)

- b) If for the previous user testing session, you had the option to conduct it either in an experimental lab or in the actual work environment of the potential users, discuss which option you would choose and justify your answer (assume that there were no financial constraints that might affect your decision).

(5 marks)

A2.

- a) Figure 1 shows an error message when a user tries to reset their password.
- Explain whether this is an appropriate error message and justify your answer.
 - Provide a recommendation of how this could be improved.

Change password

User ID

Old password

Create new password

This password does not meet the length, complexity, age or history requirements of your corporate password policy.

Confirm new password

Figure 1

(8 marks)

- b) Explain what Fitt's Law in UX is and what it is used for. **(5 marks)**
- c) Studies show that individuals from different cultures interpret user interface characteristics in diverse ways. What is meaningful or acceptable for one culture may not be so for others. Provide **THREE** examples that illustrate such user interface characteristics that we need to consider when designing cross cultural user interfaces. **(12 marks)**

A3.

- a) Discuss the main cognitive aspects that we need to consider when designing interactive products explaining why they are important. You may provide examples to illustrate your answers. **(8 marks)**
- b) Discuss what the System Usability Scale (SUS) is, what we measure with SUS and its benefits. **(8 marks)**
- c) Discuss **THREE** types of envisionment techniques we use in UX. **(9 marks)**

[Turn Over]

Section B
Answer Section B questions in Answer Book B

B4.

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) Studying users, their goals, and their tasks, is an important part of the UX design process. If you are designing an online system to help users set up a retirement fund and you are planning to perform a task analysis, how would you go about deciding what is a task, what is a goal and what is the relationship between tasks and goals.

(9 marks)

B5.

Jakob Nielsen's 10 usability heuristics (principles) are often used for usability evaluation and to analyse the UX of applications and/or systems. They are listed below:

1. Visibility of system status.
2. Match between system and the real world.
3. User control and freedom.
4. Consistency and standards.
5. Error prevention.
6. Recognition rather than recall.
7. Flexibility and efficiency of use.
8. Aesthetic and minimalist design.
9. Help users recognise, diagnose and recover from errors.
10. Help and documentation.

You have been asked to evaluate an online registration form that users could register to access short learning videos and other learning resources (i.e. a learning platform). The registration form should be appropriately designed to help users fill in their personal details – name, home address, telephone number, email address, and occupation. As well as details such as topics that they may be interested in exploring, and whether they have no previous knowledge, some previous knowledge, on the topic(s) that they wish to explore.

For **each** of the 10 usability heuristics above, provide an example of how you would evaluate the form to satisfy each heuristic (principle).

(25 marks)

B6.

a) Explain why Web standards are important to UX designers and users.

(6 marks)

b) You are a UX Designer working with your team on a new system for health professionals to use in a hospital. You know that your priority should be that the interface for this system “must be safe to use”. You need to explain to your team what “an interface must be safe to use” means for your team to be able to proceed with implementing this new system. Explain what you would say to your team.

(10 marks)

c) Explain what we mean when we describe evaluation (e.g. user testing), and we use the term ‘bias’.

(9 marks)

END OF EXAMINATION