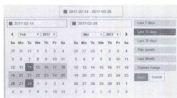# ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
Department of Computer Science and Engineering (CSE)

MID SEMESTER EXAMINATION   SUMMER SEMESTER, 2022-2023
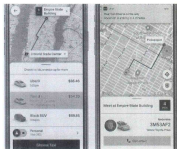DURATION: 1 HOUR 30 MINUTES   FULL MARKS: 75

SWE 4833: UI/UX Design

Programmable calculators are not allowed. Do not write anything on the question paper.
Answer **all 3 (three)** questions. Figures in the right margin indicate full marks of questions with
corresponding COs and POs in parentheses.

(a) Date Picker   (b) Uber Trip

(c) Google Search Engine

Figure 1: UI samples for Question 1

1. a) Why is mapping crucial in UX design? With appropriate reasoning, describe how Figure 1(a)   2 + 6
        and Figure 1(b) utilized mapping and the resulting benefits to user experience.   (CO2)
                                                                                                            (PO2)

    b) What is data-specific control? How does it enhance the visual structure in the context of   2 + 3
        Figure 1(a)?   (CO2)
                                                                                                            (PO2)

    c) Explain how Figure 1(c) designs for error while simultaneously incorporating feedback into   7
        its design.   (CO2)
                                                                                                            (PO2)

d) What is the concept of common fate in UX design? Provide an example to illustrate its application. 3 + 2 (CO1) (PO1)

2. Brand *XLens* is currently working on two separate projects. One involves developing a website showcasing historical artifacts, with a strong emphasis on putting the user in front and center. The other project focuses on creating an e-commerce platform for selling clothing from indigenous groups, with a pressing deadline due to the upcoming Indigenous Peoples' Day.

For the historical artifacts website, junior designer Alen proposed a design where users can view artifacts on one side of the webpage while reading related historical details in English on the other side. Additionally, senior designer William recommended incorporating recorded details for viewing artifacts and providing recorded details for each item. William also emphasized the importance of language options for text and audio, ensuring that historical information is accessible to all individuals regardless of their background.

Meanwhile, for the clothing store website, senior designer Lauren suggested incorporating the design with elements of ethnicity, including using the actual names of the garments with detailed descriptions. Additionally, she proposed incorporating an advertising panel to advocate for the rights of indigenous groups and share their cultural heritage with a broader audience.

a) Describe the user-centered design framework. 5 (CO1) (PO1)

b) Determine the design approaches of Alen and William. Discuss why William's design choice aligns better with the user-centered requirement compared to Alen's more general design. 2 + 6 (CO3) (PO2)

c) Elaborate on how the outcome of William's design approach is not only accessible but also extends usability to other users. 6 (CO2) (PO2)

d) Given the urgent deadline, which design framework should Lauren select for designing the e-commerce platform? Outline the steps associated with the design process briefly within the context provided. 2 + 4 (CO3) (PO2)

3. Imagine company *Retro-Seekers* is developing a new app for job seekers and employers, akin to popular job-related platforms like *LinkedIn*. This app aims to transform the job search and recruitment process by providing a comprehensive platform for connecting qualified candidates with relevant job opportunities. Additionally, it will serve as a hub for professional networking, career development, and industry insights. Other similar platforms include *Indeed*, *Glassdoor*, and *Monster*, which offer similar features for job seekers and employers alike.

a) Propose appropriate foundational research methodologies for the given scenario. Discuss how to mitigate designer biases while identifying user needs in this context. 4 + 3 (CO2) (PO2)

b) Suggest end user groups representing various user types in the provided scenario. Justify your answer. 4 (CO2) (PO2)

c) Create two personas based on the provided scenario. Images are not required for persona creation. 2 × 4 (CO4) (PO3)

d) Write three user stories based on the personas. 2 × 3 (CO4) (PO3)