



COMSATS UNIVERSITY ISLAMABAD (CUI)

DEPARTMENT OF COMPUTER SCIENCE
MIDTERM EXAMINATION SPRING -2025
BS (CS & SE)- VI & VII SEMESTER

Course: CSC 303 Mobile Application Development

Instructor: Qanetah Ahmed, Shujat Hussain

Maximum Marks: 30

Dated: 17th April, 2025

Time Allowed: 8:30AM-10:00AM

- All questions are self-explanatory and require no further explanations during exam time.
- Make sure that you have signed the attendance sheet before leaving the examination room.
- Return the question paper along with the answer sheet.
- Attempt all questions.

(CLO – 1: Apply Flutter/DART concepts to develop mobile application user interfaces, BT-3)
[5+5=10 Marks]

Q.# 1.

- a) You are tasked with drafting a mobile application screen using Flutter that displays a user's profile information including their name, profile picture and a short bio.

Use Flutter widget concepts make a UI (code) that fulfills the following requirements:

- The screen should have an AppBar with the title "User Profile"
- Display a circular profile picture using a widget of your choice.
- Below the picture show the user's name in bold and a short bio in normal text.

- b) By applying the concepts of widgets make a product detail screen in Flutter that includes an image of the product, a TextField to allow the user to enter the quantity they want to order and a Button labeled "Add to Cart". When the user taps/clicks the button, a popup should appear showing the quantity entered and confirming the item was added to the cart. Mention the Flutter widgets you would use and how you would organize them to build an effective and responsive user interface.

(CLO –2: Construct attractive front-end for mobile applications using latest technologies, BT-6)
[5+5 = 10 Marks]

You have to design a mobile application for a coffee shop. The application will allow customers to browse the menu, place orders and view their placed orders. Your goal is to construct a simple version of this app with technologies/approaches you've used.

Following are the requirements that you need to work on:

- Design a screen that displays a list of available coffee drinks. Each item should have a name & price.
- Design a screen that shows the already placed orders made by the user, displaying the username/ID, drink name and the date of the order. (Pending/Placed Orders)

This may be considered to be on the Admin side.

*You can use ArrayList to store the menu items if needed. No usage of simple list widget.

- b) Design a **delivery options form** using Radio buttons for Standard Delivery, Express Delivery and Pick-up. When the user presses "**Confirm**", display the selected option below using ScaffoldMessenger.

(CLO -3: Develop backend for mobile applications using modern technologies, BT-6)

Q.# 3.

[5+5 = 10 Marks]

Construct a two-page application, a **Complaint Submission page** and a **Response Status page**. The Complaint **form** will include fields for Name, Email, Complaint Type, Description and Contact Number. If any field is left empty, a popup error message should appear (ScaffoldMessenger). After successful submission, the user should be redirected to the Response Status page.

The Complaint Type should be passed and displayed on the next page.

The Response page will show fields for Complaint ID, Response Message and Resolution Status (Pending/Resolved). When submitted a popup (ScaffoldMessenger) should confirm successful record saving.

If any field is incomplete, a popup should remind the user to fill in all details.

*****BEST OF LUCK*****