Air University
(Mid-Term Examination: Spring 2025)

Subject: Intro to Software Engineering	**Total Marks:** 50
Course Code: SE101	**Date:**
Class: BS-CYS	**Time:**
Semester: II	**Duration:** 2 Hours
Section: A/B	**FM Name:** Mr. Usama Bin Amir

HoD Signature: _____

FM Signature: _____

Group Lead Signature: _____

Note:
- This examination carries 25% weight towards the final grade.
- Attempt responses on the answer book only.
- Nothing is to be written on the question paper.
- Rough work or writing on question paper will be considered as use of unfair means.

	Q. No. 1 (CLO 1)	25 Marks
a	Explain the steps involved in the Software Development Lifecycle with examples?	10
b	List down the requirement gathering techniques and explain how interface analysis and focus group helps in requirement gathering?	10
c	Differentiate between wireframe, mockup, and prototype with examples?	5

	Q. No. 2 (CLO 4)	25 Marks
a	The Online Therapy Platform use case example brilliantly showcases its key functions, making it super easy to understand how users can navigate the platform. With features like booking therapy sessions, attending them online, checking out therapist profiles, and managing bookings, it's like having a personal guide through the whole process. 1. Identify Primary, Secondary, & Off-Stage Actors (if available)? 2. Identify Functional and Non-Functional Requirements from the given case study? 3. Draw Use Case Diagram of the following study? 4. Identify include, exclude, generalize relationships (if available)?	05

b	Perfect Pizza wants to install a system to record orders for pizza and chicken wings. When regular customers call Perfect Pizza on the phone, their phone number goes automatically into the Pizza system. The phone number invokes the name, address, and last order date comes automatically up on the screen. Once the order is taken, the total, including tax and delivery, is calculated. Then the order is given to the cook. A receipt is printed. Occasionally, special offers (coupons) are printed so the customer can get a discount. Drivers who make deliveries give customers a copy of the receipt and coupon (if any). Weekly totals are kept for comparison with last year's performance 1. Identify external entities, processes, data stores and data flows? 2. Draw a context diagram for Perfect Pizza? 3. Explode the context-level diagram to level-1 showing all the major processes?	10
c	**Make a Swimlane Activity Diagram for Order Management System:** The Order System diagram should illustrate a customer ordering process. It starts when a customer places an order and enters details. The system then displays the order and total, requests payment, and processes it. Upon payment confirmation, the order is listed as confirmed, prepared, and staged for pickup. 1. Identify the participants. 2. Label each lane clearly with the participant's name or role. 3. Map the process steps.	10

***************** End of Question Paper *****************