COMSATS University Islamabad, Abbottabad Campus

Department of Computer Science

MID-TERM EXAMINATION – Fall 2023

Class: BSE- 3C/4A/5A
Subject: Topics in Software Engineering
Total Time Allowed: 1.5 hr.
Name: _____

Date: 1st November 2023
Instructor: Ahsan Riaz
Max Marks: 40
Registration #_____

Important Instructions:

1. Cheating/copying in any case will lead to failure in exam.
2. Cross talking is not allowed. Mobile phones also are not allowed.
3. All questions are mandatory.
4. It is Important to read each question very carefully before attempting.

SECTION-B (20 Marks)

Note: Briefly answer the following questions.

Question 1: [5 marks]
What is the misconception of elaboration phase of unified process? **(CLO-1)**

Question 2: [5 marks]
What Is Agility? Define 6 Agile Principles. **(CLO-1)**

Elicitation
Analysis
Specifica
Validation

Question 3: [5 marks]
Define Requirement Engineering? Explain main activities involves in requirement engineering process? **(CLO-2)**

Question 4: [5 marks]
Illustrate the benefits of iterative and evolutionary development? **(CLO-2)**

SECTION-C (20 Marks)

Question 1: [10 marks]

A ship crew member wants to make an online purchase. The purchased item can be delivered to the member via either a courier service or regular mail, and this choice is determined by the member's status, whether they have a VIP or ordinary membership. Additionally, the store may send a confirmation notification to the member if they have selected this option while placing the order. For this given scenario: **Create a Sequence diagram for the given system. (CLO-3)**

Question 2: [10 marks]

Read the scenario carefully and answer the questions stated at the end.

A student may register for classes during a specified registration period. The advisor must approve each course that the student has selected. The advisor will use the registration system to determine if the student has met the course prerequisites, is in good academic standings and is eligible to register. If the advisor approves the courses, the advisor enters the student's university id into the course registration system. The course registration number for each course is entered. The course description, course number and section for those courses will automatically display. The system will check for schedule conflicts before saving the registrations. The student should print Semester Fee Challan from system. Faculty can use the registration system to check enrollments in their classes, get a class list, check a student's transcript, and look up a student's phone number and other such student information. The registrar can use the registration system to enter new classes for an upcoming semester, cancel a class, and check conflicts in classroom/faculty assignments. The admission office uses the registration system to add new students. The administrator will report on semester freeze, update student information, and check fulfillment of graduation requirements for those students planning to graduate.

Part A: DRAW Use case Diagram for above case study using the guidelines and concepts that were discussed in the Class. IDENTIFY all the Actor types, include, extend, association etc.

Part B: Draw Fully Dressed Usecase for "Print Fee Challan" Usecase. **(CLO-3)**

