

Daffodil International University
Department of CSE

Class Test: 3 (Summer: 26), Section: 66L

Course Title: Software Engineering

Course Code: CSE315

Time: 1 Hour

Marks: 15

Answer the following questions:

5 x 3 = 15

	A university library is introducing a smart library management system. Members can borrow multiple books, while each book can only be borrowed by one member at a time. Librarians manage book records and issue or return books. Different types of members (Student and Faculty) share common properties but also have their own unique characteristics.	
1.	Identify the classes, attributes, and operations required for the system.	6
2.	Draw a UML Class Diagram illustrating: ➤ Generalization (inheritance) between member types. ➤ Associations with proper multiplicity. ➤ Any interface that could improve the system design.	6
3.	Explain how <u>inheritance</u> and <u>interfaces</u> improve the maintainability and extensibility of the system.	3