**COMP 246 Object-Oriented Software Engineering, Mid-Term Test**

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**Part B**

**Case Scenario:** 10 marks

Given that a Customer Account class (has a 1:1 relationship with the Customer class and a 1-to-many with the Payment class) and an Item Promotion class of discount options (have a 0 to many relationships with the Item) are added to the above diagram, subdivide the diagram, and list a set of FIVE sub-systems that can lend themselves to a modularized component-level design model.

The list is started up for you.

Add Four more subsystems

1. Customer Account subsystem
2. Item Promotion Subsystem
3. Order Management Subsystem
4. Payment Subsystem
5. Product Catalog Subsystem

Item Promotion Subsystem - manages the functionality connected to item promotions, including applying promotions to products, maintaining discount options, and tracking promotional information.

Order Management Subsystem - Responsible for managing the order-related operations, including creating orders, order details, order status, and order processing workflows.

Payment Subsystem - oversees all aspects of payment management, including processing transactions, payment information, and various payment methods (credit, cash, cheque, and wire transfer).

Product Catalog Subsystem - manages the functions linked to the product catalogue and the inventory, including the management of the goods' names, costs, weights, and availability.