

Daffodil International University
Faculty of Business and Entrepreneurship
Department of Business Administration
Mid-term Examination: Summer 2026
Course Instructor: FS

Course Title: Inventory Management

Time: 01:30 Hours

Course Code: 0416-413

Total Marks: 25

Please answer the following questions. You are required to attempt all of them.

1	Vision electronics retailer in Bangladesh imports laptops from international manufacturers and sells them through its physical stores and online platform. One of its laptop models is sold at BDT 80,000. Market research indicates that customers perceive the value of the product, warranty support, and after-sales service to be worth approximately BDT 95,000. However, the company recently experienced rising inventory carrying costs, increased warehouse rental expenses, higher transportation costs due to fuel price hikes, and additional promotional expenses to clear slow-moving stock. Management is concerned that although sales are increasing, profitability is not improving at the same rate. a) Explain supply chain surplus and identify how it is represented in the given scenario using the provided customer value and supply chain cost information? b) Explain how supply chain surplus is created in this scenario by describing the relationship between customer value, selling price, and supply chain cost?	5	CLO 1 LII
2	Fair Distribution Limited manufactures and assembles smartphones for the Bangladeshi market. Based on sales forecasts, the company imports chips, batteries, screens, and other components several months in advance. These components are stored in warehouses and partially assembled before the selling season. However, Walton noticed that customer preferences regarding colors, storage capacity, software features, and promotional packaging often changed rapidly. To address this issue, the company decided to do final assembly, packaging, and software customization until receiving confirmed orders from distributors and major retailers. This approach reduced excess inventory while allowing the company to respond more effectively to changing market demand. a) Explain the activities in the scenario that represent the Push phase and the Pull phase of the supply chain. b) Explain how postponement is used in this scenario to improve alignment between production planning and customer demand?	5	CLO 1 LII
3	A retail supermarket chain in Bangladesh operates multiple outlets across major cities. To ensure continuous product availability, the company maintains various types of inventories including perishable food items, packaged goods, and imported electronics. However, the company has recently faced challenges such as product wastage due to overstocking of perishable items, frequent stockouts of high-demand products during peak	5	CLO 1 LII

	seasons, and increasing costs related to storage, transportation, and inventory handling. a) Explain the role of inventory in the supply chain, identify the main types of inventories used in the above scenario, and describe the key inventory-related costs affecting the company's operations and performance.		
4	Akhter is a furniture manufacturer in Bangladesh produces customized home and office furniture for high-income customers. Customers can select their preferred designs, colors, materials, and dimensions. Each order is unique, and production starts only after receiving customer specifications. Customers are generally willing to wait several weeks for delivery in exchange for customization and quality. Recently, the company attempted to reduce costs by shifting toward mass production and producing standard furniture in large batches. Customer interaction was reduced, customization options were limited, and inventory levels increased. Although production costs decreased, customer complaints and order cancellations increased significantly. a) Apply the concept of strategic fit to determine how well the company's current supply chain strategy matches its customer demand characteristics. Support your answer using the scenario?	5	CLO 2 LIII
5	A rapidly growing online grocery platform in Dhaka offers one-hour delivery service to customers. To achieve this, the company operates multiple small fulfillment centers across the city and keeps higher inventory close to customers. While this ensures very fast delivery and high customer satisfaction, it has significantly increased operating costs due to warehouse rent, inventory holding, and transportation expenses. In contrast, a traditional FMCG distributor supplies retailers from a single central warehouse located outside Dhaka. This model helps reduce operating costs and improves inventory efficiency, but customers experience longer delivery lead times. As market competition increases, both companies are exploring ways to improve their performance without losing their competitive advantages. a) Apply the concepts of supply chain responsiveness and efficiency to analyze the above scenario. Identify which company follows a responsiveness-focused strategy and which follows an efficiency-focused strategy and suggest one practical way the online grocery platform can improve efficiency without significantly reducing responsiveness.	5	CLO 2 LIII