

School of Business

Master of Business Administration MBA Dual Specialization Semester End Examination - Jun 2024

Duration : 180 Minutes
Max Marks : 100

Sem II - D1PK205T - MBDS5032 - Operations and Supply Chain Management

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Evaluate the challenges that organizations may encounter in developing and maintaining an effective MPS (Master Production Schedule), and propose strategies to address these challenges. K5(5)
- 2) Examine and explain the supply chain involved when a customer purchases a cup of coffee at a local café. Illustrate the cycles in this supply chain and the location of the push/pull boundary. K3(6)
- 3) **Strategies Aren't Always Successful** K4(8)

In the early 1990s, Walmart embarked on a strategy that dictated that a third of new growth would come from abroad. Walmart's first store outside the United States was a Sam's Club that opened in Mexico City in 1991. Mexico would go on to become the company's most successful international market, followed by Canada, where it bought a struggling chain of stores in 1994 and turned it around. But as the company pursued more acquisitions to hit its aggressive targets, criticism followed. "It was growth for growth's sake," says Yarbrough. To some, the deals seemed more opportunistic than deliberate. Says former Walmart executive Bendel, "It's a little bit of an overstatement to say they had an international strategy—other than acquiring businesses in new markets."

As Walmart expanded in Germany in 1998, they learned a brutal lesson. Walmart insisted on bagging groceries for customers, which in Germany signaled a higher-end shopping experience and eroded Walmart's value proposition. Clerks were required to smile at customers, which was not socially acceptable in the country, Germans had trouble pronouncing the company's name, and the company clashed with unions. Eventually, they pulled out in 2006.

Questions for discussion (4 marks each)

a) Identify the problems faced by Walmart in Germany.

- b) Analyse the problem faced by Walmart and give your suggestions.
- 4) Analyse with examples significance of control charts in monitoring process performance and maintaining quality standards throughout the supply chain. K4(8)
- 5) Alyssa's Custom Cakes currently sells 5 Birthday, 2 Wedding and 3 Specialty Cakes each month for \$50, \$150 and \$100 each respectively. It takes 90 minutes to produce a birthday cake, 240 minutes to produce a wedding cake and 60 minutes to produce specialty cakes. Alyssa's current TFP (Total Factor Productivity) is 1.25 K3(9)
- A. Assuming each cake costs the same to make, what is the average cost to produce a cake. (4)
- B. Calculate Alyssa's labor productivity ratio in dollars per hour for each type of cake. (4)
- C. Based solely on the labor productivity ratio, which cake should Alyssa try to sell the most. (1)
- 6) Taylor Industries In the past, has used a fixed-time period inventory system that involved taking a complete inventory count of all items each month. However, increasing labour costs are forcing Taylor Industries to examine alternative ways to reduce the amount of labour involved in inventory stockrooms, yet without increasing other costs, such as shortage costs. Here is a random sample of 20 of Taylor's items in the following table. K3(9)
- a) Using an ABC inventory control plan recommend what Taylor can do to cut back its labour cost? (6 marks)
- b) Item 15 is critical to continued operations. How would you recommend it be classified? (3 marks)

Item Number	Annual Usage (in Rs)	Item Number	Annual Usage (in Rs)
1	1,500	11	13,000
2	12,000	12	600
3	2,200	13	42,000
4	50,000	14	9,900
5	9,600	15	1,200
6	750	16	10,200
7	2,000	17	4,000
8	11,000	18	61,000
9	800	19	3,500
10	15,000	20	2,900

- 7) Power tone Gensets is a Bangalore – based company, which manufactures electrical generators for industrial use. The marketing department of power tone Gensets has provided the data in the below table regarding demand forecasts for the coming eight weeks and the number of generators committed to its institutional customers so far. For a manufacturing lot size of 300 units, design the MPS (Master Production Schedule) and the available to promise inventory for the given duration of eight weeks. K5(10)

Weeks	1	2	3	4	5	6	7	8
Demand Forecast	76	89	163	204	88	40	112	134
Customer order committed	85	121	170	154	72	20	11	
initial inventory 50	50							

- 8) As e-commerce booms, retailers like Target and Amazon entice customers with free shipping and hassle-free returns. Target is revamping its stores to accommodate a separate entrance for returns, while Nordstrom offers a "Drop and Shop" service. Zappos goes a step further with no time limit on returns, and Happy Returns plans to set up return bars in malls. While returns ease consumer risk, they pose logistical challenges and can be costly. The expense, averaging 7 to 10 percent of goods sold, includes shipping, often hidden in product prices. Despite the allure of free returns and shipping, they come at a cost. Globally, Amazon does blacklist customers who have unusually high rates of return. In India, on platforms like Myntra customers are shown their returns profile and are warned of separate fees when the RoR is very high.

K4(12)

Questions:

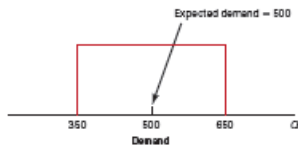
- a) Examine how do retailers like Target and Amazon strategically leverage free shipping and returns to attract and retain online customers? (6 marks)
- b) How do pricing strategies on platforms like Amazon account for the cost of offering free shipping and returns, and what impact does this have on consumer behavior and purchasing decisions? (6 marks)
- 9) Read the case and answer the question at end: Bloomingdale's, under Macy's division, addresses a common retail challenge with innovative technology. "Smart fitting rooms" equipped with Apple iPads streamline the shopping experience. Customers and associates can scan items to check availability, view ratings, reviews, and receive recommendations. This initiative aligns with Macy's broader strategy to enhance competitiveness. Macy's leads in utilizing unsold in-store inventory for online orders and offers convenient store pickup for online purchases.

K5(15)

Questions:

- a) Analyse the potential implications of integrating Apple iPads into fitting rooms for other aspects of retail, such as inventory management and staff productivity? (8 marks)
- b) Explain to what extent do initiatives like smart fitting rooms contribute to Macy's long-term strategy in adapting to changing consumer preferences and evolving retail trends? (7 marks)

EXHIBIT 3 Probability Distribution for Single-Period Model



10) **Read the case and answers the following questions:**

K6(18)

Brooklyn Central was an innovative American-style restaurant nestled within the vibrant Elante Mall in Chandigarh, India. Owned and managed by the Bains family, the establishment was renowned for its delectable American cuisine, unique dining ambiance, and exceptional service. This culinary gem had earned prestigious accolades, including the Times Food Awards for three consecutive years from 2014 to 2016, thanks to its unwavering commitment to quality and innovation.

The Bains family's decision to establish the restaurant at Elante Mall was meticulously considered. They recognized the mall's strategic location, which attracted a diverse clientele, including shoppers, movie-goers, and professionals from the neighbouring office spaces. Moreover, the mall's bustling atmosphere and ample parking facilities made it an ideal destination for food enthusiasts. The family conducted thorough research, exploring various locations across Chandigarh, but it was the unique blend of convenience and vibrant energy at Elante that won them over.

One of the key factors contributing to Brooklyn Central's success was its thoughtful layout and seating arrangements. The restaurant's open kitchen concept allowed diners to witness the culinary magic in action, fostering transparency and trust. The kitchen was divided into three sections - appetizers, desserts, and main courses - ensuring smooth operations and timely delivery of orders. The seating areas were strategically designed to cater to different preferences, including indoor and outdoor options, booths for privacy, and bar counters for a lively ambiance.

The restaurant's New York City theme, inspired by the daughter's experience living in the Big Apple, added a touch of urban sophistication. The ambiance, complemented by carefully curated music and lighting, created a captivating dining experience. Annu, who was also an interior designer, ensured that every element, from furniture to decor, reflected the restaurant's theme and ethos.

Menu engineering played a pivotal role in Brooklyn Central's success. The menu was thoughtfully designed to showcase the restaurant's specialties, healthy options, and chef's recommendations. Regular updates and seasonal changes kept the menu fresh and appealing. Customer feedback was actively sought and considered, ensuring that the menu resonated with the

evolving preferences of diners.

The restaurant's operations were meticulously managed, with a base kitchen located nearby to ensure efficient supply chain management. Housekeeping activities were carried out diligently, and staff training was prioritized to maintain high-quality standards. As Brooklyn Central considered expanding its footprint, the choice of location for the next outlet was carefully evaluated. The new location would need to align with the restaurant's brand identity, demographic preferences, and growth potential. Factors such as competition, footfall, and cost would be crucial in determining the success of the new venture. It was in the process of negotiations to find a potential franchisee, who could maintain the same standards as Brooklyn Central. But the location was yet to be decided. Should it be in Chandigarh or Delhi? Should it be a franchise model or self-ownership? Would it be a stand-alone destination location or again at a mall location? What activities should the Bains focus on to improve business profitability?

Questions (6 marks each):

- a) Elaborate the significance of menu engineering for a restaurant management system. Explain the menu engineering method followed by Brooklyn Central.
- b) Discuss why is an open kitchen a growing trend in current restaurant management systems? What are the pros and cons of an open kitchen in a restaurant?
- c) Recommend which location should Brooklyn choose for their next outlet?