



PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION

HAROLD PUPKEWITZ GRADUATE SCHOOL OF BUSINESS

QUALIFICATION : DIPLOMA IN BUSINESS PROCESS MANAGEMENT	
QUALIFICATION CODE: 06DBPM	LEVEL: 6
COURSE CODE: OLM611C	COURSE NAME: OPERATIONAL LOGISTICS MANAGEMENT
SESSION: JUNE 2024	PAPER: PAPER 1
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION – QUESTION PAPER

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MODERATOR:	Ms. Hilma Nuuyandja

INSTRUCTIONS

1. Answer ALL the questions.
2. Write clearly and neatly.
3. Number the answers clearly.

PERMISSIBLE MATERIALS

1. Examination paper
2. Examination script

THIS QUESTION PAPER CONSISTS OF 7 PAGES (INCLUDING THIS FRONT PAGE)

SECTION A
CONSISTS OF THREE QUESTIONS

Question 1

2 MARKS x 20 = 40 MARKS

1. What is the overarching purpose of operations management?
 - a) Increasing employee satisfaction
 - b) Maintaining a clean workspace
 - c) Managing products, processes, and services within the supply chain
 - d) Expanding the customer base

2. Which of the following best describes the role of operations management in a manufacturing facility?
 - a) Monitoring marketing strategies
 - b) Managing human resources
 - c) Overseeing inventory levels and production processes
 - d) Analyzing financial statements

3. Which of the following is NOT a component of the 5S methodology used in operations management?
 - a) Sort
 - b) Shine
 - c) Support
 - d) Standardize

4. What is the primary goal of capacity planning in operations management?
 - a) Maximizing resource utilization
 - b) Minimizing customer demand
 - c) Matching production capacity with demand
 - d) Reducing production costs

5. What does the term "supply chain resilience" refer to in operations management?
 - a) The ability to quickly adapt to changes in demand
 - b) The tendency to overstock inventory as a precaution
 - c) The efficiency of transportation networks
 - d) The speed of order fulfillment

6. What does the term "kanban" refer to in operations management?
 - a) A type of inventory management system used in Lean manufacturing
 - b) A scheduling technique used in Agile project management
 - c) A quality control method in Six Sigma
 - d) A performance measurement tool in Total Quality Management (TQM)

7. What is a potential advantage of good demand management?
 - a) Decreased collaboration with value chain partners
 - b) Increased reliance on inaccurate data
 - c) Improved demand forecasting
 - d) Reduced efficiency in supply chain operations

8. How does successful anticipation and planning of demand contribute to a business?
 - a. It creates supply chain bottlenecks
 - b. It increases market competition
 - c. It provides a competitive advantage
 - d. It decreases revenue generation

9. Which supply chain strategy involves collaborating closely with suppliers to improve efficiency and reduce costs?
 - a) Lean manufacturing
 - b) Agile supply chain
 - c) Vendor-managed inventory (VMI)
 - d) Supply chain integration

10. What is a key factor for improving supply chain operations?
 - a) Reactive demand management
 - b) Inaccurate demand forecasting
 - c) Proactive demand management
 - d) Overstock situations

11. What is the primary objective of continuous improvement initiatives such as Six Sigma and Lean in supply chain management?
 - a) To maximize profitability
 - b) To minimize customer complaints
 - c) To reduce waste and inefficiency
 - d) To increase market share

12. What is the primary purpose of collaborative demand forecasting?
 - a) To rely on inaccurate data
 - b) To create supply chain bottlenecks
 - c) To reach consensus on expected demand
 - d) To decrease overall supply chain efficiency

13. What is the primary objective of cross-docking in warehouse management?
 - a) Maximizing storage space utilization
 - b) Minimizing order processing time
 - c) Reducing transportation costs
 - d) Improving inventory accuracy

14. What is the main benefit of using a computerized MRP system?
 - a) Enhanced accuracy in inventory management
 - b) Increased lead times
 - c) Reduced need for bills of materials
 - d) Minimal analysis of production capacity

15. What is the primary goal of operational management in supply chain management?
- a) Maximizing customer satisfaction
 - b) Maximizing shareholder value
 - c) Minimizing costs
 - d) Minimizing supply chain complexity
16. Which characteristic of demand is particularly relevant for businesses operating in dynamic and rapidly changing markets?
- a) Volume
 - b) Velocity
 - c) Variability
 - d) Variety
17. Which of the following is a characteristic of a "Pull" production system?
- a) Production is based on forecasted demand
 - b) Production is triggered by actual customer orders
 - c) Inventory is pushed through the production process
 - d) Inventory levels are maintained at maximum
18. The two most important factors in choosing a forecasting technique are
- a) Cost and time horizon
 - b) Accuracy and time horizon
 - c) Cost and accuracy
 - d) Quantity and quality
19. The goal of Total Quality Management (TQM) is to:
- a. Maximize production output
 - b. Minimize customer feedback
 - c. Maximize employee turnover
 - d. Achieve zero defects and improve customer satisfaction
20. Which of the following is a characteristic of Agile operations management?
- a. Quick adaptation to changing market conditions
 - b. Predictable and rigid processes
 - c. Emphasis on long-term planning
 - d. Traditional hierarchical organizational structure

Question 2**2 MARKS X 7 = 14 MARKS**

1. In operational logistics management, a high inventory turnover ratio always indicates efficient inventory management practices.
2. In operational logistics management, a centralized distribution network typically results in lower transportation costs compared to a decentralized network.
3. The concept of postponement involves delaying the customization of products until the last possible moment, which can increase lead times and hinder operational logistics efficiency.
4. Operational logistics management does not require collaboration with competitors or other stakeholders in the supply chain for mutual benefit.
5. Adopting a just-in-time (JIT) inventory management approach eliminates the need for risk management in operational logistics since it minimizes inventory holding costs.
6. Risk management in operational logistics involves identifying potential disruptions in the supply chain, such as natural disasters or supplier bankruptcies, and developing strategies to mitigate their impact.
7. While blockchain technology can enhance transparency and security in operational logistics management, it does not entirely replace traditional inventory management practices like cycle counting and physical audits.

Question 3**2 marks x 5 = 10 marks**

Please match each concept in logistics operations management in column A with its corresponding factor in column B. Select the most appropriate factor from the provided options for each concept. Ensure careful consideration of the nuances in each concept to make accurate matches.

Concept In Logistics Operations Management In Column A	Corresponding Factor In Column B Only choose
1.1 Consideration of various factors such as mode of transportation, distance, and urgency of delivery, to strike a balance between minimizing transportation costs and maximizing speed.	a) Cost-effectiveness versus. premium service (1.3)
1.2 Incorporating factors such as route planning, contingency measures, and supplier reliability to ensure on-time delivery while minimizing disruptions.	b) Achieving cost savings without compromising service quality
1.3 Balancing cost-effectiveness with high service levels by considering customer expectations, competitive positioning, and profitability.	c) Inventory optimization versus demand variability (1.4)
	d) Balancing delivery speed with environmental impact.
	e) Mode of transportation selection vs. cost, speed, and reliability (1.5)
	f) Choosing between air freight for speed and sea freight for cost-effectiveness

1.4 Strategic alignment of inventory levels with demand variability and supply chain responsiveness, considering factors such as demand forecasting accuracy, lead times, and product lifecycles	g) Prioritizing cost efficiency over supplier reliability
1.5 Evaluating the trade-offs between using different transportation modes, such as road, rail, air, or sea, considering factors like cost, speed, reliability, and environmental impact.	h) Cost optimization versus speed prioritization (1.1) i) Managing inventory turnover while minimizing stockouts j) On-time delivery versus disruption mitigation (1.2)

**SECTION A
CONSISTS OF TWO QUESTIONS**

Question 4

Case Study: Leevi Manufacturing Company in the Automotive Parts Industry

Leevi Manufacturing Company has established itself as a leading player in the automotive parts industry, renowned for its production of various components critical for vehicles. With a history of delivering high-quality products, Leevi Manufacturing has garnered a strong reputation among automotive manufacturers and consumers alike.

Despite its standing in the industry, Leevi Manufacturing faces significant operational challenges that threaten its competitiveness and market position. These challenges revolve around inefficient production processes, struggles with demand forecasting and inventory management, and vulnerability to disruptions in the global supply chain.

Leevi Manufacturing's production processes, while functional, suffer from inefficiencies that hinder its operational performance. Outdated machinery and equipment, coupled with insufficient workforce training, contribute to frequent breakdowns and disruptions in production. Additionally, the layout of production facilities may not be optimized for workflow efficiency, leading to bottlenecks and delays. These inefficiencies result in increased lead times and difficulties in meeting production schedules, ultimately affecting customer satisfaction and market competitiveness.

Another area of concern for Leevi Manufacturing lies in its struggles with demand forecasting and inventory management. Inaccurate demand forecasts, driven by volatile market conditions and limited visibility into customer demand, lead to imbalances in inventory levels. Consequently, the company faces challenges of either overstocking, tying up capital and storage space, or understocking, resulting in stockouts and missed sales opportunities. Ineffective inventory control practices exacerbate these challenges, further impacting the company's ability to optimize production efficiency and meet customer demand effectively.

Leevi Manufacturing's operations are vulnerable to disruptions in the global supply chain, posing significant risks to its supply chain continuity. Reliance on single-source suppliers, geopolitical risks, natural disasters, and transportation disruptions can all impact the company's production schedules and customer satisfaction. Any delay in deliveries, quality issues with raw materials,

or supply chain disturbances can have far-reaching consequences, affecting the company's reputation and market competitiveness.

In light of these challenges, addressing inefficiencies in production processes, improving demand forecasting and inventory management capabilities, and fortifying the supply chain against disruptions are critical priorities for Leevi Manufacturing. By implementing strategic initiatives to enhance operational efficiency and resilience, the company can navigate the complexities of the automotive parts industry and sustain its competitive edge in the market.

Instructions to Students: After reading the case study of Leevi Manufacturing Company, please prepare responses to the following discussion questions:

Question 5

Evaluate the impact of inefficient production processes on Leevi Manufacturing Company's operations and its competitive position in the automotive parts industry. Discuss how these inefficiencies contribute to bottlenecks, delays, and increased lead times, and analyze the consequences for both production schedules and customer satisfaction. Additionally, assess the potential risks and implications of failing to address these operational challenges effectively.

(18 marks)

Question 6

Critically analyze the factors contributing to Leevi Manufacturing Company's struggles with demand forecasting and inventory management. Identify specific examples of inaccurate forecasts and ineffective inventory control practices, and assess their implications for inventory levels, capital utilization, and carrying costs. Discuss the importance of accurate demand forecasting and effective inventory management in optimizing production efficiency and enhancing customer satisfaction.

(18 marks)

Subtotal: 36 marks

Total: 100 marks