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KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2023/2024 ACADEMIC YEAR
THIRD YEAR, FIRST SEMESTER EXAMINATION
FOR THE DEGREE OF BACHELOR OF SCIENCE
(BUSINESS ADMINISTRATION)

Date: 8th December, 2023
Time: 8.30am –10.30Am

KPS 302 - MATERIAL MANAGEMENT

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

Case Study: Streamlining Materials Management in Jeymap automobiles PLC

Jeymap PLC is a leading player in the automobile industry, specializing in the production of high-quality vehicles. The company was founded over 50 years back as a family business but has grown immensely over time to become one of the largest multinationals. The company is known to thrive on the implementation of best in class practises in management of operations. The company's past success relied heavily on efficient materials management processes like accuracy in demand forecasting, Strategic Sourcing and Just In Time inventory management among many other operations management practices. These Best practises has ensured timely availability of raw materials, components, and parts for production not to mention reduced stock holding costs.

Jeymap makes a lot of procurement savings through negotiation with her suppliers, global and strategic sourcing among other supply chain value creating initiatives. Due to recent disruptions in supply chain, Jeymap has faced continued challenges in optimizing her material management practices which has led to occasional delays in production thereby resulting missed targets, lost sales and increased operational costs. The management has decided to conduct a comprehensive review of their materials management system from End To End to enhance efficiency and reduce operational costs.

- a) Annalady has been employed at Jeymap as the Chief Operations Officer and is expected to drive the review of the material management practice at Jeymap and make recommendations to the Board. Discuss the at least twelve materials management challenges that Annalady should include in her presentation to the Board. (6 Marks)
- b) Discuss six strategies that Jeymap Automobiles can implement to optimize her inventory levels and improve production planning. (6 Marks)
- c) Discuss the possible causes behind the excess inventory and stockouts at Jeymap Automobiles. (6 Marks)
- d) Explain the challenges that Jeymap Automobiles might face during when trying to implement solutions to her current materials management challenges. (6 Marks)

- e) Explain six strategies that Jeymap Automobiles can adopt to sustain the improvements in materials management in the long term. (6 Marks)

QUESTION TWO (20 MARKS)

- a) A group of supply chain management students are visiting Big Mark Enterprises. The students are here to learn practical aspects of Production Planning. Ms Queen, the Production Manager is preparing a presentation for the students. Three key stake holders in production planning process that Ms Queen will present to the students. (6 Marks)
- b) The Demand Planning Manager at Mixmatch PLC, Ms Grace is expecting a group of supply chain students who are visiting the newly constructed Mixmatch Distribution Centre to increase their appreciation of supply chain management. Discuss THREE key factors that Ms Grace should explain to the students to have influenced management decision on the location of the Mixmatch Distribution Centre. (6 Marks)
- c) Explain how Mixmatch can to reduce their inventory holding costs. (8 Marks)

QUESTION THREE (20 MARKS)

- a) The new Demand Planning Manager is unable to review the factors that influence the Demand Planning within the organization given the industry dynamics. Kenyanitto a Suuply Chain Consultant has been contracted to help with the review of these factors. Discuss four potential factors that influence Demand Planning that Kenyanitto must recommend for implementation in the demand planning process. (4 Marks)
- b) Kings Matters Ltd is reviewing and categorizing the different categories of goods received at her warehouse. Quen Matella the Inventory cordinator has been tasked to categories all the goods expected at the warehouse. Discuss EIGHT different categories of goods that Kings are likely to receive in their warehouse. (8 Marks)
- c) Discuss eight principles and practices for inventory record keeping that Kings Matters should adopt for effective inventory management. (8 Marks)

QUESTION FOUR (20 MARKS)

- a) Discuss the factors that Mary, the Warehouse Manager should consider in receiving of goods in the warehouse. (4 Marks)
- b) Discuss the reasons why production planning must be very important to Mary as the warehouse Manager. (8 Marks)
- c) Mary is facing a constant challenge of surplus inventory. Explain the common causes of surplus materials that Mary might be facing. (8 Marks)

QUESTION FIVE(20 MARKS)

- a) Patrick the Production Manager with Mali Mali wants to incorporate Production Planning in the manufacturing process. Clearly outline four limitations of production planning that he needs to appreciate in his plans. (8 Marks)
- b) Discuss four key roles that Demand Forecasting can play for Patrick in planning for production. (4 Marks)
- c) Discuss the strategies that Patrick can adopt to plan a good store's layout. (8 Marks)