



BACHELOR OF SCIENCE IN SUPPLY CHAIN AND OPERATIONS MANAGEMENT
END OF SEMESTER EXAMINATION
SCM 1104: SUPPLY CHAIN MANAGEMENT OVERVIEW

Date: Thursday, 9th December, 2021

Time: 2 Hours

Instructions

1. This examination consists of **FIVE** questions.
2. Answer Question **ONE (COMPULSORY)** and any other **TWO** questions

QUESTION ONE (40 Marks)

1. XYZ is a company that produces mango juice for sale. The company gets its raw materials from Z limited and sells to various distributors. At the onset of the COVID -19 pandemic, XYZ experienced a rise in fluctuation of demand by 50%. This led to the company procuring a variety of fruits and venturing into different juice product lines (mango, pineapple, apple and kiwi). Whereas the demand had gone up, there was misrepresentation of information across the XYZ supply chain players. For instance, the retailers knew the demand was 10,000 packets of mango juice but passed information to the wholesalers that the demand was 20,000 packets of mango juice. The wholesaler also passed information to the manufacturers that demand was 40, 000 packets of mango juice. The manufacturer also sourced for fruits that would produce 60,000 packets of juice. Six months down the line since the onset of the pandemic (September, 2020), XYZ still did forecasting based on demand during the onset of the pandemic. In mid-2021, XYZ has experienced a sharp decline in demand. The trend is so worrying since XYZ is involved in the operations that deal with highly perishable products and has a lot of products still in store due to misrepresentation of information. As a supply chain specialist, you have been called to offer strategic advice to XYZ.

Required:

- i. Explain the BULLWHIP EFFECT concept and how you think it could relate to this excerpt. **(5 Marks)**
- ii. Discuss FIVE steps that XYZ need to follow for proper demand forecasting. **(10 Marks)**

2. Strathmore University is involved in the training of high human resources for both the job market and entrepreneur industry. Using your knowledge in supply chain network tiering, draw Strathmore University's supply chain network tier up to two levels. **(6 Marks)**
3. As a senior supply chain planner at the East African Breweries Limited (Nairobi), you are deliberating on whether to have your operations onshore, near shore or offshore. However, in one of the board meetings with the CEO and other directors, you have been requested to be explicit on how the on shore, near shore and offshore will positively impact the operations of EABL.

Required: Outline a sourcing portfolio for the EABL Company. **(6 Marks)**

4. "We have learned to live in a world full of mistakes and defective products as if they were necessary to life. It is time to adopt a new philosophy in America." Using this excerpt, Outline any of Deming's THREE points and their relevance to supply chain management.

(3 Marks)

QUESTION TWO (20 MARKS)

Using the Nestle case study, Assess the cycle view for the various stages of the Nestle supply chain. **(20 Marks)**

QUESTION THREE (20 MARKS)

Strathmore University is working to be a world class University in major strategic areas (Healthcare, supply chain, Business and Engineering) that drive economic development. To achieve this, the University needs a well outlined strategic framework.

- i. Discuss using THREE points how Strathmore University will achieve strategic fit. **(10 Marks)**
- ii. Evaluate using FIVE points how Strathmore will be able to drive its supply chain performance. **(10 Marks)**

QUESTION FOUR (20 MARKS)

1. Supply chains are entities driven by human emotional and cognitive biases. Outline THREE fundamental tenets of behavioral and supply chain psychology that need to be assessed when making supply chain decisions.

(9 Marks)

2. Explain using THREE points any of the emerging issues within the field of supply chain management. **(9 Marks)**

3. Using Strathmore University as a reference point, explain your understanding of supply chain management. **(2 Marks)**

QUESTION FIVE (20 MARKS)

Current business platforms are highly driven by information technology, more so in decision making and problem solving. Discuss Using TEN points (spread well across the supply chain) how the supply chain can utilize information technology in its major macro processes in up scaling its responsiveness and efficiency.

(20 Marks)