The Management University of Africa



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UNDERGRADUATE UNIVERSITY EXAMINATIONS SCHOOL OF MANAGEMENT AND LEADERSHIP DEGREE OF MASTER OF BUSINESS ADMINISTRATION

LSO 501:

LOGISTICS AND SUPPLY CHAIN MANAGEMENT

DATE:

AUGUST, 2021

DURATION: 3 HOURS

MAXIMUM MARKS: 60

INSTRUCTIONS:

- 1. Write your registration number on the answer booklet.
- 2. DO NOT write on this question paper.
- 3. This paper contains FOUR (4) questions.
- 4. Question ONE is compulsory.
- 5. Answer any other TWO questions.
- 6. Question ONE carries 30 MARKS and the rest carry 15 MARKS each.
- 7. Write all your answers in the Examination answer booklet provided.

QUESTION ONE

Read the Case Study below carefully and answer the questions that follow:

LOGISTICS DRIVEN PACKAGING INNOVATION

Standardised unit load carriers, such as pallets, are fundamental components in packaging and logistics systems. Standardised unit load carriers have indisputably played a central role in shaping logistics systems and have provided firms with handling and transport efficiency. A more efficient size and shape standardisation of pallets for fast-moving consumer goods in Kenyan grocery supply chains could cut logistics costs by the equivalent of 2 per cent of sales revenue. These savings would accrue from improved utilisation of vehicle cube, better space utilisation and more efficient handling of materials in warehouses and stores, and reduction in the use of packaging material. The strength of standardised packaging is that it makes it easier to develop efficient logistics systems because it places similar demands on transport and material-handling equipment. However, standardisation may also lead to less adaptability with regard to change. Thus, when setting standard specifications for packaging, it is important to anticipate future changes of the packaging context as well as the permanence of these specifications.

In an ever-changing marketplace, new emphasis and requirements are placed on packaging and logistics systems, so that the effectiveness of using standardised unit load carriers is questioned. Globalisation is an unmistakable paradigm shift which has increased supply chain distances, since raw material supplies, material conversion, assembly and end-consumers can all be located in different parts of the world. Owing to this shift, some unit load carrier functions have become increasingly important to logistics systems, namely: enabling efficient transport, ensuring product quality by protecting goods under global transport conditions, and product security. Differences in infrastructure, logistical structures, and transport and material-handling equipment between markets place additional emphasis and requirements on unit load carriers and

logistics systems. For example, in industrialised countries, the majority of the material flow is based on different standardised unit load carriers. However, in recently industrialised countries, unit load carrier standards are rare. International regulations also place additional emphasis and requirements on unit load carriers. One example of a regulatory requirement is compliance with the *International Standard for Phytosanitary Measures*, in order to reduce the risk of introducing and/or spreading quarantine pests associated with wood packaging material. Consequently, with global sourcing and distribution, companies are confronted with different unit load standards around the world. Therefore, to meet both new and traditional unit load carrier requirements, packaging and logistics managers need to re-evaluate their unit load carrier options and make required trade-offs in optimising their operations both globally and regionally. What unit load carrier innovations would enable firms to stay ahead of competition? Should standardised or differentiated unit load carriers be used? Should reusable or recyclable unit load carriers be used? These are only a few of the unit load carrier options managers are presented with.

Required

- a) In reference to the case study, standardisation of pallets for fast-moving consumer goods in Kenyan grocery supply chains could cut logistics costs by the equivalent of 2 per cent of sales revenue. Extensively elaborate how improved performance can be achieved in grocery supply chain. (15 marks)
- b) From the case study, global sourcing and distribution, companies are confronted with different unit load standards around the world. Explain five challenges likely to be encountered by companies in global sourcing and distribution of goods. (15 marks)

QUESTION TWO

- a) Explain five factors that may have an influence on how a supply chain network is designed. (5 marks)
- b) Elaborate five challenges of distribute and supply chain operations in a country like Kenya. (10 marks)

QUESTION THREE

- a) Explain how the Corona-virus COVID19 has affected the trends in distribution and supply chain management in Kenya (5 marks)
- b) Container systems can be viewed as a specialized mode of freight transport. Discuss five benefits of containerization in distribution (10 marks)

QUESTION FOUR

- a) Discuss five factors that should be considered when selecting potential third party logistics contractors (3PL) providers. (5 marks)
- b) Examine five potential areas of Measuring distribution and supply chain performance. (10 marks)

LSO 501: Page 4 of 4