



MODULE : LOGISTICS MANAGEMENT 3A
CODE : LMA13A3 / LBE3A01
DATE : 27 MAY 2017
DURATION : 3 HOURS
TOTAL MARKS : 180

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MODERATOR : MR H LEMMER
NUMBER OF PAGES : 7 PAGES

INSTRUCTIONS TO CANDIDATES:

- Answer all the questions
- Question papers must be handed in.
- This is a closed book assessment.
- Read the questions carefully and answer only what is asked.
- Number your answers clearly.
- Write neatly and legibly
- Structure your answers by using appropriate headings and sub-headings.
- The general University of Johannesburg policies, procedures and rules pertaining to written assessments apply to this assessment.

SECTION 2

AB Company, a South African company, manufactures various products and distributes it throughout South Africa. Currently AB Company operates four factories in Pretoria, Cape Town, East London and Pietermaritzburg. The final product is moved to one or more DCs in the area of the plant from where it is transported to the customers based on customer orders.

A year ago the company utilised ABC analysis to identify the most profitable customer-product combinations and subsequently also performed a detailed customer service audit. This process was followed in all their customer areas. The results of these analyses indicated that the Gauteng region had the highest distribution cost and the lowest service levels.

The Gauteng network consists of a factory in Pretoria West and two distribution centres (DCs), one next to the factory and one in Wynberg. The factory is supplied with raw material from a supplier in Klipriver and the DCs are replenished from the factory in Pretoria from where the relevant customer base is serviced.

The Pretoria factory supplies to a DC adjacent to the factory and a DC in Wynberg, Johannesburg. The Pretoria DC handles the Pretoria and surrounding customers, whereas the Wynberg DC supplies to customers in Johannesburg and surrounding areas. AB Company owns some of the facilities, but also leases some of the factories and DCs, for example the Pretoria factory. The lease agreement of the factory in Pretoria terminates in three years and the company needs to decide whether to renew the lease or to find an alternative location for the factory and Pretoria DC.

Management believes that the expiry of the lease agreement of the Pretoria factory provides the perfect opportunity for the company to evaluate its distribution costs. The distribution is performed by a third party and the service agreement with the third party includes a fuel surcharge which is adjusted on a monthly basis according to the fuel price.

During a number of management meetings the entire logistics function was identified as a potential area that could lead to cost reductions. Specific logistics issues that were identified to be addressed were the logistics network, supplier relationships and the existing outsourcing arrangement. However, the logistics manager reminded management that the first step should be the development of a logistics strategy.

QUESTION 1**[38 MARKS]**

- a) Although AB Company's distribution is outsourced, transportation remains a critical cost contributor. Explain to AB Company how the following transport factors impact on the facility location decision:
- tapering rates;
 - blanket rates;
 - commercial zones;
 - foreign trade zones and
 - transit privileges. (10)
- b) AB Company may use various modeling approach to provide insight into the choice of a logistics network design. Discuss the common pitfalls that should be avoided in designing and implementing a logistics network. (14)
- c) Discuss the reasons why a company may use a third party service provider. (14)

QUESTION 2**[40 MARKS]**

AB Company's logistics manager has indicated that a logistics strategy should be developed.

- a) Explain the process that you would follow to develop a logistics strategy. (20)
- b) Why is it important for companies in the current logistics environment to consider implementing a logistics strategy? (8)
- c) How does the logistics strategy support the overall corporate strategy? (12)

QUESTION 3**[33 MARKS]**

As a result of increasing customer expectations and technological advances it may become important for AB Company to develop closer cooperation with their supplier and customers to enhance future success.

- a) Discuss logistics relationships in terms of the types of relationships, as well as the intensity of involvement. What information is required should AB Company decide to select a supply partner? (13)

- b) Maintaining the relationship with the supplier requires assessment. Discuss the assessment of supply partner performance in terms of the levels of assessment and the methods of assessment. (14)
- c) Which factors should AB Company consider if they select a 3PL? (6)

QUESTION 4**[39 MARKS]**

- a) Which future developments (driving forces in supply chain management) should AB Company consider in the development of their logistics strategy? (12)
- b) AB Company may consider implementing various logistics strategies, but this depends on the company's overall strategies. Discuss time-, asset-, technological- and relationship based strategies as potential logistics strategies. (27)

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