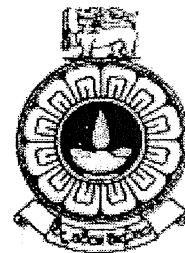


**THE OPEN UNIVERSITY OF SRI LANKA**  
**PG DIPLOMA IN TECHNOLOGY/**  
**MASTER OF TECHNOLOGY**  
**FINAL EXAMINATION 2014 / 2015**  
**TTM7136 – SUPPLY CHAIN MANGEMENT**  
**DURATION - THREE HOURS**



**DATE: 06<sup>th</sup> September 2015**

**TIME: 0930 - 1230HOURS**

**This paper contains Eight (8) questions in Four (4) pages**

**Answer the question 1, which is compulsory, and five (05) additional questions.**

**Question 1 carries twenty five (25) marks and questions 2 to 08 carry fifteen (15) marks each. (Number of questions to be answered = 06)**

**The answers should be well focussed and informative enough to consider as a complete answer.**

**Question 1 (Mandatory)**

**(7 x 3 + 4 = 25 marks)**

- (a) State KAIZEN concept and briefly explain the avenues you can apply the KAIZEN concept for improving an apparel industry supply chain.
- (b) Briefly discuss on the phases an organisation typically should undergo when developing an integrated supply chain.
- (c) Briefly explain why it is important to understand the three themes, *Responsiveness, Reliability and Relationships*, for a successful supply chain management.
- (d) Briefly explain why it is necessary to answer three (3) specific questions in the process of managing risks of a supply chain.
- (e) Briefly discuss the “contracted transport cost” and state why the transport decisions should not be made based only on the contracted transport cost.
- (f) List the fully integrated modules you might come across in a *Warehouse Management System (WMS)*.

- (g) Briefly explain the process of selecting an IT system for a garment manufacturer to support on its supply chain management.
- (h) Briefly discuss the challenges on apparel supply chains due to globalisation
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**Question 2**

(2 x 7½ = 15 marks)

- (a) Suppose you took over as the General Manager of a small apparel production company that has a more traditional distribution channel. What steps you would consider for transforming the business towards a modern apparel supply chain.
- (b) How would you reorganise your supply chain if you want to follow the rule; "A supply chain must add value at each stage"?

**Question 3**

(2 x 7½ = 15 marks)

- (a) *Extreme* is a leading garment manufacturer who imports the materials and exports the total production to the international market. Discuss the specific factors that influence *Extreme's* transport decisions. Highlight the specific factors that influence the shipper decisions and the carrier decisions.
- (b) Suppose that *Extreme* has established a wing where they import materials and release their total production to the local market. Discuss the specific factors that influence the new wing of *Extreme's* transport decisions. Highlight the specific factors that influence the shipper decisions and the carrier decisions.

**Question 4**

(15 marks)

Discuss the functions of inventories. Why do we need inventory management?  
What are the key elements of effective inventory management?

Elaborate how you could consider inventory management under your quality management process.

**Question 5**

(2 x 7½ = 15 marks)

(a) As the newly appointed Supply Chain Executive, you were asked to design the supply chain for the planned branded garment manufacturing. What are the major issues associated with developing the supply chains for a branded garment manufacturer? Discuss how the challenges evolve through the stages of the product life cycle, introduction, growth, maturity and decline.

(b) What are the main aspects of the reverse logistics with respect to the branded garments? Discuss the range of activities that include handling products and materials with respect to the reverse logistics.

**Question 6**

(2 x 7½ = 15 marks)

(a) Suppose you are managing a warehouse designed for the garment industry as a 3PL provider. Discuss the general operations of the warehouse.

(b) Compare and Contrast the operations of a typical of Consolidation warehouse and a typical Break-bulk warehouse.

**Question 7**

(2 x 7½ = 15 marks)

- (a) Explain why the technology alone cannot be the competitive differentiator for any supply chain.
- (b) Criticise the notion, "to exist the supply chain must be traceable and measurable".

**Question 8**

(3 x 5 = 15 marks)

Briefly explain how you would consider the following approaches in the apparel industry.

- (a) Material Requirement Planning (MRP)
- (b) Manufacturing Resource Planning (MRP II)
- (c) Capacity Requirement Planning (CRP)
- (d) Enterprise Resource Planning (ERP)
- (e) Extended Enterprise Resource Planning (ERP II)