

**UNIVERSITY OF BOLTON**

**SCHOOL OF BUSINESS & CREATIVE  
TECHNOLOGIES**

**MSc SUPPLY CHAIN MANAGEMENT  
NEIL FULLER ASSOCIATES**

**SEMESTER TWO EXAMINATIONS 2010/2011**

**PHYSICAL SUPPLY CHAIN MANAGEMENT**

**MODULE NO: EBU4009**

Date: 20<sup>th</sup> May 2011

Time: 3 Hours

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**INSTRUCTIONS TO CANDIDATES:**

There are **SIX** questions on this paper.

Answer **ANY FOUR** questions.

All questions carry equal marks.

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Physical Supply Chain Management  
Module No. EBU4009

**Question 1**

A major problem to be solved by those arranging storage facilities is the selection and adoption of an appropriate internal location system. Explain the principal alternative approaches to the solution of the 'what goes where?' question, indicating any problems or shortcomings arising from each approach

**Total 25 Marks**

**Question 2**

Many organisations experience financial and operational problems arising from a steadily increasing proliferation of stock items.

- a) Discuss how a systematic approach to 'variety reduction' of existing inventories might be applied towards a solution of this problem.
- b) Explain the steps that might be taken as preventative measures in respect of proliferation.

**(15 Marks)**

**(10 Marks)**

**Total 25 Marks**

**Question 3**

Explain the following terms as employed in the context of classification and coding systems:

- a. Significant part numbers. **(5 Marks)**
- b. The use of check digits or characters **(5 Marks)**
- c. The concept and purpose of 'redundancy' **(5 Marks)**
- d. The UPC and EAN **(5 Marks)**
- e. Machine readable codes **(5 Marks)**

**Total 25 Marks**

**Question 4**

Green supply chain management is an initiative that aims to incorporate environmental factors into traditional supply chain management. It aims at reducing carbon emissions, adopting sustainable procurement policies and encourages material recycle. Identify the goals of green supply management and discuss how implementing a green Sales and Operations Plan for a chosen industry will help organizations to be greener.

**Total 25 Marks**

**Please turn the page...**

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**Question 5**

Describe the logic behind MRP as an inventory control method, detailing the elements that are essential to its operation. Support your answer with a diagram.  
**(10 Marks)**

Supply Chain Management Systems have been widely touted to provide an integrated view of an organisation and provide the basic infrastructure for integrating suppliers and customers. However, these implementations have also often brought failures and have even made businesses bankrupt.

Discuss the above statement, with examples of supply chain disasters due to the failure of an Enterprise System implementation, and debate why there is a high failure rate in the successful implementation of this system

**(15 Marks)**  
**Total 25 Marks**

**Question 6**

What would be the planning and control activities for a warehouse that offers third party warehousing services (Pick / Pack, Sub assembly, Cross Docking, Order Fulfilment) for the apparel industry?

**(12 Marks)**

Identify the Key Performance Indicators that you will use for measuring the effectiveness of operations?

**(8Marks)**

Choose a specific service from the above context and depict the material flow for that service with a simple diagram / flow chart. (You can make assumptions if necessary)

**(5 Marks)**  
**Total 25 Marks**

**END OF QUESTIONS**