UNIVERSITY OF BOLTON

INSTITUTE OF MANAGMENT

(MSC LOGISTICS AND SUPPLY CHAIN MANAGEMENT)

SEMESTER 2 EXAMINATIONS 2021/2022

LOGISTICS MANAGEMENT

MODULE NO: SCM7002

Date: Thursday 19 May 2022

Time: 10.00 – 1.00pm

INSTRUCTIONS TO CANDIDATES:

There are two parts to this paper.

PART A is worth 50 marks and contains two questions based on a Case Study.

PART B is worth 50 marks and contains two questions.

Answer ALL questions.

All questions are worth 25 marks.

Formula Sheet and Case Study supplied at the end of examination paper.

PART A (CASE STUDY)

Read the "Clear Cut Textiles Limited" Case Study supplied at the end of this paper and answer BOTH questions from this part.

Q1. Logistics Management and Working Capital

a) The following table contains liquidity and efficiency ratios for Clear Cut Textiles Limited based on the projected accounts from the appendix of the case study. Show how these figures were derived. You may assume that all sales and purchases are credit based and you must clearly show ALL workings.

Ratio	Re-focus	Relocation
Current Ratio	2.3	5.7
Acid Test Ratio	1.5	2.1
Debtors' Collection Period	29	91
Creditors' Payment Period	49	37
Stock Days	37	183

[10 marks]

b) The production manager at Clear Cut Textiles Limited has remarked that the option of "Relocation" should not be considered as it will put the company in financial difficulties that will be serious in the longer term. In your opinion, to what extent do the above ratios and extracts from the financial statements support her claim?

[15 marks]

Q2. Inventory, Logistics, and Challenges in Retail

- a) While the senior management team of Clear Cut Textiles Limited is excited about the possibility of re-focus, it has three particular concerns about this option:
 - Short product lifecycles and the demand-driven nature of fashion;
 - The wide variety of product components and small order volumes from retailers typical of fashion products; and
 - Communications with retailers, especially fashion retailers, tend to be limited and order specific.

Briefly explain the potential impact of each of these issues on logistics and inventory management. Use examples to support your discussion.

[15 Marks]

b) The development of strategic partnerships with fashion retailers should minimise the issue of communications and provides a strong foundation from which to address the other two. What recommendations would you make to address the other two issues and thus minimise their potential impact on logistics and inventory management? Give reasons for your answer.

[10 marks]

<u>PART B</u>

Answer BOTH questions from this part.

Q3. Transportation and Logistics Channels

Global transportation involves more that the physical movement of goods from geographically separated locations. The physical flows must be supported by information flows through effective communication and funds flows through agreed terms of trade. These flows occur through logistics channels (Wood *et al*, 2002): communication channels, distribution channels, and transaction channels, respectively.

a) Critically examine the key activities in each of the communication and distribution channels. Use examples to support your answer.

[10 marks]

b) To facilitate terms of trade, the International Chamber of Commerce publishes a harmonised set of terms to clarify international shipments. These are know as "InCoTerms". Two such terms are "Ex Works" (EXW) and "Cost, Insurance, Freight" (CIF). Which would you recommend as a basis of trade for an UK importer of garments dealing with suppliers based in Bangladesh?

[15 marks]

Q4. Logistics Management and the Extended Enterprise

a) Critically examine the relationship between "logistics management" and "supply chain management". Your answer should include a clear definition of each term and use examples to support your discussion.

[10 marks]

b) The "Value Matrix" (Rayport and Sviokla, 1995) provides a framework to integrate and share in digital form information captured from the physical activities of an organisation, its suppliers, customers, and other key partners. Using the value matrix as a framework, or otherwise, evaluate the claim that digital technologies are essential to contemporary logistics cost-effective fulfilment of customer orders. Use examples to support your discussion.

[15 marks]

END OF PART B END OF QUESTIONS PLEASE TURN THE PAGE

Institute of Management (MSc Logistics and Supply Chain Management) Semester 2 Examination 2021/2022 Logistics Management Module No. SCM7002 <u>CASE STUDY</u>: Clear Cut Textiles Limited

Clear Cut Textiles Limited is a family-owned UK-based textiles manufacturer that provides a limited number of high-volume finishing processes for fabrics that are used for a range of outdoor applications. The company serves a small number of large international customers in Europe and the United States; it has good working relationships with key suppliers. Currently, the majority of Clear Cut Textiles Limited's operations are automated, which means that labour costs are minimised; however, other operating expenses, in particular, utilities and energy costs, are high and there are concerns that these will increase over the longer term. Moreover, many staff are very close to retirement age and whatever the future holds, the company will need to invest significantly in the recruitment and training of new staff. Recently, the senior management of the Clear Cut Textiles Limited has undertaken a strategic review and identified two possible future directions for the company.

Re-focus. The first possible direction would involve a complete re-focusing of the business and a strategic partnership with a number of key Fashion Retailers in the North West of England. To achieve this, Clear Cut Textiles Limited would remain in the UK but operations would be scaled down and a significant portion of plant and equipment sold: the funds generated would be used to refurbish and refit the retained production facilities; and support recruitment and training of new employees. There would be key investment in Fashion Design and an emphasis would be placed on the development of close working relationships with partners. While the second direction would result in a reduced turnover, streamlined operations and a focus on more profitable markets mean that the gross profit would be the same.

Relocation. The second possible direction is for the company to continue serving its current markets and offshore production facilities. Relocation of production would allow Clear Cut Textiles Limited to take advantage of lower utility and energy costs; it would also allow the release of capital currently tied up as equity in land and buildings: part of the funds generated would be invested in R&D which would be located principally in the UK. The preferred destination for relocation is Latvia, which is preferred to alternatives of Slovakia and Bangladesh; as Slovakia is landlocked, there are concerns that transportation costs would be significantly higher; Bangladesh was felt too far away from key markets.

Whichever direction is chosen, the changeover will begin in Autumn 2023 and is expected to take eighteen months. A decision is to be made during the next couple of months; extracts from the projected Financial Statements of the Clear Cut Textiles Limited for the year ending 2023 for each possibility (Re-focus or Relocation) are shown in the appendix.

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Appendix – Extracts from Projected Financial Statements

	Re-focus 2023		Relocation 2023	
	£000s	£000s	£000s £000s	
Balance Sheet				
Current Assets	-			
Debtors	200		1500	
Stock	150		2500	
Cash	100	-		
		450	4000	
Current Liabilities				
Creditors	200		500	
Overdraft		-	200	
		200	700	
	1			
P&L Account			Y	
Sales		2500	6000	
Cost of Sales		1500	5000	
Gross Profit/(Loss)		1000	1000	
ASTRA				

END OF CASE STUDY PLEASE TURN THE PAGE

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FORMULA SHEET

Current Ratio =

Current Assets

Current Liabilities

Current Assets *excluding* Stock

Current Liabilities

Acid Test Ratio =

Debtors' Collection Period =

Debtors x 365 Sales

Creditors' Payment Period =

Creditors x 365 Cost of Sales

Stock Days =

Stock x 365 Cost of Sales

END OF EXAMINATION PAPER