



**FACULTY OF MANAGEMENT
JUNE EXAMINATION 2014**

DEPARTMENT: TRANSPORT AND SUPPLY CHAIN MANAGEMENT

MODULE : LOGISTICS DECISION SUPPORT SYSTEMS
CODE : LMA8X03/LBE03X7
DATE : 02 JUNE 2014
DURATION : 3 HOURS
TIME : 12:30 – 15:30
TOTAL MARKS : 100

EXAMINER(S) : MS. A D'AMATO
EXTERNAL MODERATOR(S) : MR. WESLEY NIEMANN
NUMBER OF PAGES : 3

INSTRUCTIONS TO CANDIDATES:

- 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.

QUESTION 1**(41.5 Min : 30 Marks)**

The Cunningham Weaving Company has been experiencing low profitability in recent years. As a result the board of directors has asked for a logistics audit to be performed.

This audit MUST be completed using the STRATEGIC PROFIT MODEL TEMPLATE PROVIDED for all sections required. The template must be completed in full where possible.

Cunningham Weaving Company's financial statements are supplied below and you are required to use the financial data provided for 'The Cunningham Weaving Company' to provide the following:

- The ROA, Financial leverage, and RONW for Cunningham Weaving Co. (15)
- Indicate by how much Transport expenses must decrease in order to achieve a ROA of 6% (15)

| Balance Sheet at 31 March 2011 | | | |
|---------------------------------------|-------------------|-----------------------------|-------------------|
| Share capital | 100 | Fixed assets | 140 |
| Retained earnings | <u>114</u> | Accumulated depreciation | <u>20</u> |
| Owners' equity | 214 | Total fixed assets | 120 |
| Long term debt | 36 | Current assets | <u>194</u> |
| | | Stock | 106 |
| | | Trade debtors | 46 |
| | | Cash | 42 |
| | | Total assets - gross | 314 |
| | | Current liabilities | <u>64</u> |
| | | Trade creditors | 39 |
| | | Bank overdraft | 25 |
| Total | <u>250</u> | Total | <u>250</u> |

| Income Statement for the year ended 31 March 2011 | |
|--|------------|
| Net sales | 530 |
| Cost of goods sold | <u>425</u> |
| Gross profit | 105 |
| Operating expenses: | |
| Variable expenses | 40 |

| | |
|------------------------------|------------------|
| Fixed expenses | <u>30</u> |
| Operating profit | 35 |
| Interest paid | <u>9</u> |
| Net income before tax | 26 |
| Tax (35%) | <u>9</u> |
| Net income after tax | <u>17</u> |

QUESTION 2

(36 Min: 20 Marks)

Supply Chain Information Systems (SCIS) typically fall into four categories. Name and briefly describe the four categories into which SCIS's can be classified. (4) Also list at least four types of systems within each category and briefly describe their functions. (16)

QUESTION 3

(36 Min: 20 Marks)

Six technology-assisted drivers of supply chain excellence can assist organisations to generate adaptive capabilities to synchronise supply chains in order to improve competitive advantage. List these drivers of supply chain excellence and describe how each will contribute to a more efficient supply chain. Please elaborate with examples.

QUESTION 4

(27 Min: 15 Marks)

The integration of E-Commerce into Enterprise Resource Planning solutions may yield many benefits. The first area within business to gain huge benefit was the functional area of procurement management. Discuss E-Procurement, with specific focus on the benefits that E-Procurement has brought to the entire supply chain.

QUESTION 5

(21 Min: 15 Marks)

Discuss what is meant by the term 'Collaborative Planning, Forecasting and Replenishment' (CPFR) and how CPFR may influence customer service levels.

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