

FACULTY/COLLEGE	College of Business and Economics	
SCHOOL	Johannesburg Business School	
DEPARTMENT	Transport and Supply Chain Management	
CAMPUS(ES)	АРК	
MODULE NAME	Logistics Decision Support Systems	
MODULE CODE	LMA8X03	
SEMESTER	First	
ASSESSMENT OPPORTUNITY,	Final Assessment Opportunity	
MONTH AND YEAR	May/June 2019	

ASSESSMENT DATE	31 May 2019	SESSION	08:30 - 11:30
ASSESSOR(S)	Mrs AA d' Amato Groenewald		
MODERATOR(S)	Mr W Niemann		
DURATION	3 hours (180 min)	TOTAL MARKS	180

NUMBER OF PAGES OF QUESTION PAPER (Including cover page)

5

INFORMATION/INSTRUCTIONS:

- This is a closed-book assessment.
- There are 6 questions.
- Answer all questions.
- Read the questions carefully and answer only what is required.
- Number your answers clearly and correctly as per the question paper.
- Write neatly and legibly on both sides of the paper in the answer book, starting on the first page.

You have been appointed the Supply Chain Director of a leading logistics organisation operating predominantly in South Africa - please answer all the following questions in this capacity.

QUESTION 1

(20 MARKS) The rise of connected devices that make up the Internet of Things (IoT) might just make the smartphone revolution seem trivial in comparison. Review Big Data @ Work, limitless data and possibilities.

QUESTION 2

Businesses today generate extraordinary amounts of data and systems have become highly complex. Information Technology must exchange more and more information. Discuss evolving smart grid systems and the integration challenges.

QUESTION 3

Evaluate the options available to your organisation relating to e-Commerce fulfilment strategies.

QUESTION 4

Evaluate the various Supply Chain Information Systems (SCIS) categories available within your supply chain and match the category to the system by use of examples.

QUESTION 5

Discuss information technology capabilities of excellence in your capacity as Supply Chain Director.

QUESTION 6

Complete and evaluate the Strategic Profit Model for ABC Company on the two templates provided.

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

- a) The ROA and RONW for ABC Company. Financial Leverage equates to 1,47 (15).
- b) Indicate by how much Total Expenses must increase in order to achieve a ROA of 20% (15).
- c) Explain in detail the meaning of ROA in a) and b) for ABC Company (10).

Balance Sheet at 31 March 2011			
Share capital	100	Fixed assets	140
Retained earnings	<u>114</u>	Accumulated	<u>20</u>
		depreciation	
Owners' equity	214	Total fixed assets	120
Long term debt	36	Current assets	<u>194</u>
		Stock	106

(20 MARKS)

(40 MARKS)

(40 MARKS)

(20 MARKS)

(40 MARKS)

		Trade debte	ors 46	
		Cash	42	
		Total asset	is – 314	
		gross		
		Current lia	bilities <u>64</u>	
		Trade credi	tors 39	
		Bank overd	raft 25	
Total	<u>250</u>	Total	<u>250</u>	

Income Statement for the year ended 31 March 2011		
Net sales	600	
Cost of goods sold	425	
Gross profit	175	
Operating expenses:		
Variable expenses	40	
Fixed expenses	30	
Operating profit	105	
Interest paid	<u>9</u>	
Net income before tax	96	
Tax (35%)	<u>9</u>	
Net income after tax	<u>87</u>	



