UNIVERSITY EXAMINATIONS

**UNIVERSITEITSEKSAMENS** 



### **TRL3708**

October/November 2013

### LOGISTICS SYSTEMS

Duration 2 Hours

70 Marks

EXAMINERS FIRST SECOND EXTERNAL

MRS NJ MATSOMA PROF A BRITS PROF JH DU PLESSIS

Closed book examination

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### This exam question paper consists of 11 pages, including 2 pages for rough work.

#### **INSTRUCTIONS:**

- 1. WRITE YOUR ANSWERS ON THIS EXAMINATION SCRIPT AND HAND IT TO THE INVIGILATOR WHEN YOU HAVE FINISHED.
- 2. ON THE FRONT COVER OF THIS EXAMINATION SCRIPT, DRAW A CIRCLE AROUND THE QUESTION NUMBER OF EACH OF THE LONG QUESTIONS THAT YOU ANSWER.
- 3. READ THROUGH ALL OF THE QUESTIONS CAREFULLY.

#### THIS EXAMINATION PAPER CONSISTS OF TWO SECTIONS [19 PAGES]:

SECTION A. (COMPULSORY) ANSWER ALL THE SHORT QUESTIONS

(20 MARKS)

SECTION B: ANSWER ANY TWO (2) OF THE THREE (3) LONG QUESTIONS

(50 MARKS)

PLEASE NOTE: ONLY THE FIRST TWO (2) QUESTIONS THAT YOU ANSWER WILL BE MARKED. YOU WILL NOT BENEFIT IN ANY WAY IF YOU ANSWER ALL THREE (3) LONG QUESTIONS

TOTAL (70 MARKS)

# SECTION A ANSWER ALL THE QUESTIONS IN THIS SECTION. SUBTOTAL: 20 MARKS

What is the effect of a warehouse on transport cost in the logistics network?
Briefly explain the two types of uncertainties impacting the inventory policy
Give a short definition of the supply chain information system
Explain the importance of bar-coding and scanning in logistics
Explain one benefit of supply chain planning

1.6	What are the four alternative ways to meet specific service requirement	(4
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.7	Name two types of technologies that can be used in supply chain communication	(
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.8	Present the relationship between inventory cost and transport cost in a form of a graph.	
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[20]

# SECTION B ANSWER ANY TWO (2) OF THE THREE (3) QUESTIONS IN THIS SECTION. SUBTOTAL: 50 MARKS

## **QUESTION 2**

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following	g location decision, warehousing and manufacturing	
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22	Discuss major files that are critical for logistics operations in the central database a typical ERP system	of (1 <b>0</b> )
2 3 W	What are the five (5) transport questions that should be asked when making decisions sing a transport system? (5)	on

## **QUESTION 3**

3 1 "As warehouses are added to a logistics system, the number of performance cycles increases, and this added complexity directly impact the total inventory required across the network" Explain the following terms—base stock, safety stock and transit stock as			
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### **OCT/NOV 2013**

3 2 What do you understand by sensitivity analyses? Discuss fully (15)

[25]

# **QUESTION 4**

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4 3 Mr Smith has recently opened a transport service to deliver goods to small businesses. He consults you for advice regarding the information that he will need in order to succeed with the implementation of the transport system. Briefly advise him by mentioning the data used to analyse the transport system (10)

[25]

TOTAL [70]

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Examiners:

First : Mrs NJ Matsoma

Second: Prof A Brits

**External Prof JH Du Plessis** 

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