



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF BUSINESS

DEPARTMENT OF MANAGEMENT SCIENCE

UNIVERSITY EXAMINATION FOR:

MSc PROCUREMENT AND SUPPLY CHAIN MANAGEMENT

BPC 5103: SUPPLY CHAIN MANAGEMENT

END OF SEMESTER EXAMINATION

ORDINARY EXAMINATIONS

SERIES: AUGUST 2019

TIME: THREE HOURS

DATE: AUGUST 2019

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of FIVE questions. Attempt Question One and Any other Three Questions.

Do not write on the question paper.

QUESTION ONE

a) The data below represents the sales of Wasanii Ltd for the year ended December 2015

Months	Sales ('000's shs)
January 2015	1200
February	1280
March	1310
April	1210
May	1190
June	1290
July	1410
August	1360

September	1430
October	1280
November	1410
Decembers 2015	1390

Using a smoothing constant of $\alpha = 0.3$, generate the monthly forecasts and determine the sales for the month of January 2016 (16 marks).

- b) With clearly explained examples, discuss the main characteristics of demand forecasts (8 marks)
- c) What is bull-whip effect? With examples, explain how bull-whip effect affects supply chain operations (16 marks)

QUESTION TWO

- a) What is supplier development? With clearly articulated examples, explain the reasons for supplier development and state some of the challenges or problems experienced in supplier development (12 marks).
- b) Discuss the reasons why firms hold inventory and clearly illustrate the application of the concept of bar-coding in inventory management. (8 marks)

QUESTION THREE

- a) Mr. Wanyama the intern in your organization is wondering why the organization has to use distributors to deliver its goods to the customers when this can be done by the firm itself. Clearly explain to Mr. Wanyama the critical roles that the distributors play in the supply chain. (8 marks)
- b) Over the last few decades, the world has grown a good deal smaller and most organizations are spreading their operations to almost every corner of the world so as to remain competitive. Clearly explain the forces that collectively drive the trend towards globalization (12 marks).

QUESTION FOUR

- a) Information is the most important supply chain driver because it directly affects all the other supply chain drivers. Explain any three components of information decisions and highlight how each of the decisions can be used to achieve both efficiency and responsiveness. (10 marks)
- b) You have been hired by a new multi-national firm in the country and your first assignment is related to inventory management. Clearly advice the firm on how it can use the following approaches in managing its inventory.
 - i) Action level approach (5 marks)
 - ii) Periodic review approach (5 marks)

QUESTION FIVE

- a) “Understanding the concept of outsourcing is just a waste of time”. Is this statement true? Discuss your answer by using appropriate examples (10 marks)
- b) With explained examples, distinguish between Knowledge Process Outsourcing and Business Process Outsourcing (BPO) (10 marks)