



**TECHNICAL UNIVERSITY**

**OF MOMBASA**

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**SCHOOL OF BUSINESS**  
**DEPARTMENT OF MANAGEMENT SCIENCE**  
**UNIVERSITY EXAMINATION FOR:**  
**BACHELOR OF COMMERCE – PROCUREMENT**  
**BPC 4302: SUPPLY CHAIN MANAGEMENT**  
**END OF SEMESTER EXAMINATION**  
**ORDINARY PAPER**  
**SERIES: AUGUST 2019**  
**TIME: 3 HOURS**  
**DATE: Pick Date 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 (Compulsory) and any other TWO questions.

**Do not write on the question paper.**

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**Question ONE (COMPULSORY) – 30 Marks**

**a) Case study**

Household appliances PLC buys a wide range of components that are assembled into washing machines, cookers, dishwashers and similar white goods on a continuous assembly line basis. Such products are sold mainly in large retail outlets stocking domestic appliances but also directly to some major users, such as hospital and local and central government authorities. There is also rapidly growing overseas demand.

The retail outlets operate a form of computer assisted ordering so that, as soon as an item is sold, a replacement is ordered automatically from household appliances. Delays in the replacement of showroom stock can result in lost sales as if a household appliances model is not on view, customers buy competitor's products.

A major cause of delays is transport problems. Household appliances has not transport fleet of its own and has negotiated an outsourcing agreement with a large logistics company. The company combines drops of household appliances products with deliveries to other costumers. Because of this policy, delays of several days can occur in replenishing the retailers stock.

Originally, household appliance's had several suppliers of critical components. Following a consultancy exercise, it decided to adopt a policy of single sourcing for some items. This policy has led to several problems. The manufacture of two critical die-cast items involves the use of expensive molds .the present supplier of these two items agreed to supply the molds free of charge on the conditions that the molds

would remain the supplier's property and that household appliance's would not source elsewhere for a minimum of two years. This supplier is located some 150 miles from household appliance's factory.

Household appliances' production line also experienced a serious hold-up during an industrial dispute affecting deliveries of a third component. Subsequent enquiries elicited the facts that the supplier of the component manufactured the same item for three of household appliance's competitors, all of whom placed substantially larger orders. It also emerged that a preferred alternative supplier for this component has entered into a collaborative arrangement with one of household appliances'' competitors for the joint development of an alternative item offering substantial cost and performance advantages over that currently in use.

To obviate losses, which due to the above factors have been significant, household appliances has adopted a policy of keeping significant stocks of critical components.

- i) Identify the sources of vulnerability in household appliances supply chain. **[10 marks]**
  - ii) As purchasing manager of household appliance's PLC what steps would you recommend taking to improve the situation? **[10 marks]**
- b) The concept of a supply chain and value chains are synonymous. Define the concept with the aid of Michael porter's value chain model. **[10 marks]**

### **Question TWO**

Discuss technologies that can be utilized for an effective supply chain management decision support system.

**[ 20 marks ]**

### **Question THREE**

- a) How does logistics contribute to competitive advantages in the supply chain? **[10 marks]**
- b) Define the following words with respect to supply chain management. **[10 marks]**
  - i) Supply chain.
  - ii) Logistics.
  - iii) Agility.
  - iv) Value chain.
  - v) Lead time.

### **Question FOUR**

With respect to supply chain management explain what outsourcing is, with its advantages, disadvantages and the conditions under which it is practical

### **Question FIVE**

- a) Explain the key drivers of a supply chain and their significance to an organization. **[10 marks]**
- b) Describe the role and impact of information technology in a supply chain. **[10 marks]**

