



MUEO

MOI UNIVERSITY

**OFFICE OF THE DEPUTY VICE CHANCELLOR, ACADEMIC
AFFAIRS, RESEARCH & EXTENSION**

**UNIVERSITY EXAMINATIONS
2013/2014 ACADEMIC YEAR**

FORTH YEAR END OF SEMESTER I/II EXAMINATIONS

**FOR THE DEGREE OF
BACHELOR OF BUSINESS MANAGEMENT**

EXAM CODE:- BBM 447

**COURSE TITLE:- PRODUCTION & OPERATIONS
MANAGEMENT.**

DATE:- 26TH FEBRUARY, 2014

TIME:- 9.00A.M. - 12.00 NOON.

INSTRUCTION TO CANDIDATES

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BBM 447: PRODUCTION AND OPERATIONS MANAGEMENT

MAIN EXAMINATION

INSTRUCTIONS:-

- Answer Question **ONE** and any other **THREE** questions.
- Question **ONE** carries **25 Marks**
- Time allowed: **3 Hours**

Q1. Read the case below and answer the questions that follow:

NAKUMATT SUPERMARKET

Nakumatt Supermarket has recently revamped its food markets in all of its branches countrywide as one of its Strategic Business Unit (SBU). The company employs over 20,000 people, and has annual sales of over Shs 2 billion. Nakumatt has a strong reputation for offering its customers high product quality and excellent service. Through a combination of market research, trial and error, and listening to its customers, Nakumatt has evolved into a very successful organization. In fact, Nakumatt is so good at what it does that grocery chains all over the country send representatives to Nakumatt for a firsthand look at operations.

SUPERSTORES

Many of the company's stores are giant 100,000 square foot superstores, double or triple the size of average supermarkets. A superstore typically employs from 500 to 600 people. Individual stores differ somewhat in terms of actual size and some special features. Aside from the features normally found in supermarkets, they generally have a large bakery Section (each store bakes its own bread, rolls, cakes, pies, and pastries), and extra large produce sections. They also offer film processing a complete pharmacy, a card shop and video rentals. In-store floral shops range in size up to 800 square feet of space, and offer a wide variety of fresh-cut flowers, flower arrangements, vases and plants. In-store card shops covers over 1000 square feet of floor space. The bulk foods department provides customers with the opportunity to select what quantities they desire from a vast array of foodstuffs and some nonfood items.

Each store is a little different. Among the special features in some stores are a dry cleaning department, a wokery, and a salad bar. Some feature a Market Cafe that has different food stations, each devoted to preparing and serving a certain type of food. For example, one station has pizza and other Italian specialties, and another oriental food. There are also being a sandwich bar, a salad bar and a dessert station. Customers often wander among stations as they decide what to order. In several affluent locations, customers can stop in on their way home from work and choose from a selection of freshly prepared dinner entrees. Some stores have a coffee shop section with tables and chairs where shoppers can enjoy regular or specialty coffees and variety of tempting pastries.

PRODUCE DEPARTMENT

The company prides itself on fresh produce. Produce is replenished as often as 12 times a day. The larger stores have produce sections that are four to five times the size of a produce section of an average supermarket. Nakumatt offers locally grown produce a season. Nakumatt uses a 'farm to market' system whereby some local growers deliver their produce directly to individual stores, bypassing the main warehouse. That reduces the company's inventory holding costs and gets the produce into the stores as quickly as possible. Growers may use specially designed containers that go right onto the store floor instead of large bins. This avoids the bruising that often occurs when fruits and vegetables are transferred from bins to display shelves and the need to devote labour to transfer the produce to shelves.

MEAT DEPARTMENT

In addition to large display cases of both fresh and frozen meat products, many stores have a full-service butcher shop that offers a variety of fresh meat products and where butchers are available to provide customized cuts of meat for customers.

ORDERING

Each department handles its own ordering. Although sales records are available from records of items scanned at the checkouts, they are not used directly for replenishing stock. Other factors, such as pricing, special promotions, local circumstances must all be taken into account. However, for seasonal periods, such as holidays, managers often check scanner records to learn what past demand was during a comparable period.

The superstores typically receive one truckload of goods per day from the main warehouse. During peak periods, a store may receive two truckloads from the main warehouse. The short lead-time greatly reduce the length of the time an item might be out of stock, unless the main warehouse is also out of stock. The company exercises strict control over suppliers, insisting on product quality and on-time deliveries.

EMPLOYEES

The company recognises the value of good employees. It typically invests an average of Shs.70,000 to train each new employee. In addition to learning about stores operations, new employees learn the importance of good customer service and how to provide it. The employees are helpful, cheerfully answering customer questions or handling complaints. Employees are motivated through a combination of compensation, profit sharing, and benefits.

QUALITY

Quality and Customer satisfaction are utmost in the minds of Nakumatt management and its employees. Private label food items as well as name brands are regularly evaluated in test kitchens, along with the potential new products. Managers are responsible for checking and maintaining products and service quality in their departments. Moreover, employees are encouraged to report problems to their managers.

If a customer is dissatisfied with an item and returns it, or even a portion of the item, the customer is offered a choice of a replacement or a refund. If the item is a Nakumatt brand food item, it is then sent to the test kitchen to determine the cause of the problem. If the cause can be determined, corrective action is taken.

Questions

- (a) How do customers judge the quality of a supermarket? [4 marks]
- (b) Indicate how and why each of these factors is important to the successful operation of the supermarket.
- (i) Customer satisfaction. [3 marks]
- (ii) Forecasting. [3 marks]
- (iii) Capacity planning. [3 marks]
- (iv) Location. [3 marks]
- (v) Inventory management. [3 marks]

(vi) Layout of the store. [3 marks]

(vii) Scheduling. [3 marks]

Q2. (a) Explain the main objectives of the production management. [4 marks]

(b) Managing global operations involves deployment of facilities and operations around the world. Explain the developments, which have spurred this trend toward globalization.

[4 marks]

(c) Explain the key issues to focus on when managing global operations. [5 marks]

Q3. (a) Elaborate on the need for selecting a suitable location under the following situations:

(i) When starting a new organisation. [3marks]

(ii) In case of existing organisation. [3marks]

(iii) In case of Global Location. [4 marks]

(b) The primary goal of the plant layout is to maximise the profit by arrangement of all the plant facilities to the best advantage of total manufacturing of the product. Identify and explain the main principles of a plant layout. [5 marks]

Q4. (a) In spite of production planning and control, most of the time it is not possible to achieve production 100 per cent as per the plan. This is due to innumerable factors, which affect the production system leading to deviation from the actual plan. Explain the factors that contribute to this scenario. [10 marks]

(b) Explain the steps that an organisation can take to minimise deviation between actual production and planned production. [5 marks]

Q5. (a) Discuss in details the fundamental factors, which affect the quality of products and services. [10 marks]

(b) What consequence may befall an organisation that does not undertake quality control? Explain. [5 marks]

Q6. (a) Discuss the automation strategies that can be employed by an organisation to improve productivity in manufacturing operations technology. [9 marks]

(b) Give the reasons for the generation and accumulation of obsolete, surplus and scrap items. [6 marks]

Q7. What are the differences between the order point system and the periodic review system regarding when the orders are placed and the quantity ordered at any time? (15 marks)

END