



Kasarani Campus
Off Thika Road
Tel.2042692/3
P.O Box 49274,00100
NAIROBI
Westland Campus
Pamstech House
Woodvale Grove

KIRIRI WOMEN'S UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2024/2025 ACADEMIC YEAR
SECOND YEAR, SECOND SEMESTER EXAMINATION
FOR THE DIPLOMA IN PROCUREMENT & SUPPLIES
MANAGEMENT
DPS 1401 OPERATIONS MANAGEMENT

Date: 7TH AUGUST, 2024
Time: 2.30PM-4.30PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

Streamlining Operations at Mwihoko Bakery Limited (MBL)

Mwihoko Bakery Limited (MBL) is a family-owned business specializing in making bread and pastries. Over the recent years, MBL has experienced significant growth, however this growth has brought about several operational challenges. Despite high demand, MBL struggles with production inefficiencies, inventory management issues, and quality control problems. The bakery owner has hired an operations management consultant to analyze the situation and provide actionable solutions.

In the analysis, the consultant has identified the following as key Issues Identified to be dealt with including Production Bottlenecks involving inconsistent production processes and outdated equipment lead to frequent bottlenecks. Secondly, inventory Management where there is overstock of perishable ingredients results in waste, while stockouts of key ingredients cause production delays. Thirdly, Quality Variability where there is lack of standardized procedures leading to inconsistencies in product quality. Lastly, there is the matter of Employee Utilization involving ineffective scheduling and undertrained staff affect productivity and morale.

To resolve the challenges discovered, the consultant proposes the following solutions: Process Standardization and Equipment Upgrade which involves standardization of production processes and invest in modern equipment to streamline operations. Secondly, inventory Control System i.e. implement an inventory management system that tracks ingredient usage and optimizes stock levels. Thirdly, Quality Assurance Program which involves developing and enforcement of standardized recipes and procedures to ensure consistent product quality. Lastly, a recommendation on employee Training and Scheduling Optimization i.e. implement comprehensive training programs and optimize employee scheduling to improve productivity and job satisfaction.

- a) Discuss the main operational inefficiencies experienced at Mwihoko Bakery Limited. **(5 Marks)**
- b) Explain how standardizing production processes and upgrading equipment will benefit MBL. **(5 Marks)**
- c) Discuss the advantages that MBL will experience in the implementing an inventory management system **(5 Marks)**
- d) Discuss why the practice of quality assurance is important for MBL and which elements of Quality Assurance Programs it should include. **(5 Marks)**
- e) Explain how MBL can improve employee utilization and productivity **(4 Marks)**
- f) Describe the actions that MBL should take in order to standardize her production processes. **(6 Marks)**

QUESTION TWO (20 MARKS)

- a) Janet the Operations Director at Big Mark PLC would like to present the benefits of developing an effective product idea to his marketing team. Discuss **FOUR** benefits of developing an effective product idea that Janet should discuss with the team **(8 Marks)**
- b) Mr. Michael Peters has an appointment to discuss with his colleagues the importance of contractual relationship with their suppliers and customers given the recent parting of ways with Big Mark PLC who has historically been of the key suppliers of a key ingredient used in manufacturing. Explain at least **FOUR** importance of contractual relationship that Michael should include for discussion with his colleagues **(8 Marks)**
- c) Explain **FOUR** Limitations of Contractual relationship that Mr. Michael will experience with his suppliers who are supplying goods and services to Big Mark PLC. **(4 Marks)**

QUESTION THREE (20 MARKS)

- a) Materials Management in operations is a key lever to effective inventory management. Dawning the Head of Inventory has an appointment to discuss with his colleagues the topic of Materials Management within their organization, Dawning wants to get the basics right. Explain **FOUR** objectives of Materials Management that Dawning needs to discuss with her colleagues. **(8 Marks)**
- b) Smoothways is reviewing their entire system of production in order to harness the benefits of a streamlined and efficient operations management. Describe the benefits that Smoothways is likely to benefit after implementing a streamlined and efficient operations management. **(8 Marks)**
- c) Equipment breakdown is very disruptive in the management of daily operations. Discuss in detail the key problems a breakdown in a production plant creates to an organization. **(4 Marks)**

QUESTION FOUR (20 MARKS)

- a) Deploying the use ICT in the development of a new product is expected to be very beneficial to Matano Enterprises in the development of their new brand of biscuits. Explain the expected benefits that deployment of ICT can bring to Matano Enterprises in their new biscuits project. **(8 Marks)**
- b) The business environment has become very dynamic with frequent supply chain disruptions which makes it imperative that Mapema Ltd appreciates fully their business environment. Explain **FOUR** emerging issues in operations management that Mapema needs to appreciate in order to navigate their business environment successfully. **(8 Marks)**
- c) Kingsway entered into a contract for manufacturing of their anti-acidity medicines with a contract manufacturer in India due to their internal capacity constraints. Kingsway and their contract manufacturer are yet to carry out a Post Implementation Review. Discuss at least **TWO** benefits that Kingsway will benefit in carrying out a Post Implementation Review with their contract manufacturer. **(4 Marks)**

QUESTION FIVE (20 MARKS)

- a) Jacques the New Engineering Manager is reviewing Plant layout in a proposed new site. Explain the key factors for plant layout suitability that he needs to take into account. **(8 Marks)**
- b) Pan Africa Enterprises have suffered several plant break downs in the recent past due to poor maintenance of their recently built plant. Discuss **FIVE** types Of Plant Maintenance that Andrew the Plant Manager should immediately employ to bring a smooth production process at the plant. **(8 Marks)**
- c) Records management in a plant is one of the key success factors in operations management. Discuss at least **FOUR** importance of records maintenance in a plant. **(4 Marks)**