



# THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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**MAIN EXAMINATION**

**JANUARY – APRIL 2019 TRIMESTER**

**FACULTY OF COMMERCE**

**DEPARTMENT OF MARKETING AND MANAGEMENT**

**O DEL PROGRAMME**

**CMM 412: PRODUCTION AND OPERATIONS MANAGEMENT**

**Date: APRIL 2019**

**Duration: 2 Hours**

**INSTRUCTIONS: Answer Question ONE and ANY OTHER TWO Questions**

- Q1. a) You are a member of a management team that has organized an orientation for new employees you have been assigned a responsibility by the team to give a brief on the objectives of production management. Explain what you would include in your brief. **(10marks)**
- b) Quality of goods and services play a major role in determining the competitiveness of an organization in the market. Explain **(10marks)**
- c) Using a diagram explain the new product development process. **(10 marks)**
- Q2. a) Lang'ata Company LTD is in the process of concluding its decision on establishing a new facility location . Explain the reasons that can be attributed to this decision. **(10marks)**
- b) Explain ways in which demand forecasting promotes effectiveness in production management. **(10marks)**
- Q3. a) The objective of a facility layout plan is to arrange facilities in a way that ensures, a smooth flow of work, people, and information throughout the system. Discuss the dimensions associated with this facilities. **(10marks)**

- b) ABC Enterprise undertook a demand forecast in order to project their level of sales for the next 6yrs. Use the table below to answer the questions that follow. **(10marks)**

Period (yrs). ' 000000'	Actual Demand. '000000'	Forecasted Demand
1	6	5
2	5	6
3	7	5.5
4	8	6
5	9	6.5
6	6	-

What is the demand forecast for year 6:

1. Using 4 period moving average?
2. Using exponential smoothing with  $\alpha=0.2$ ?

Q4. a) Write short notes on

- i) B.O.M **(5marks)**
- ii) Seasonal demand. **(2 marks)**
- iii) Benchmarking. **(3 marks)**

b) Production and operations are systems which need each other. Discuss

**(10marks)**

**\*END\***