

**UGANDA MARTYRS UNIVERSITY**  
**FACULTY OF BUSINESS ADMINISTRATION AND MANAGEMENT**  
**PRODUCTION OPERATIONS MANAGEMENT (POM) EXAMINATION**  
**Date 18<sup>th</sup> December 2013**

**Instructions**

Do not write anything on the question paper  
Attempt any four questions  
Duration 3 hours

**QUESTION ONE**

- (a) This paper is entitled Production / Operations Management (POM). Briefly explain the evolution of this name from Production Management.  
( 8 Marks)
- (b) Explain the contribution of the following Scholars to the field of Production / Operations Management (POM):
- Frederick W.Taylor, 1881 ( 12 Marks)
  - Henry L. Gantt ( 5 Marks)

**QUESTION TWO**

Uganda Martyrs University(UMU) is considering opening a branch in Rwanda. Discuss the various factors to be considered in finding / selecting a suitable location for its Rwanda Branch.  
( 25 Marks)

**QUESTION THREE**

- (a) Discuss the importance of Human Resource Management in the operations management function.  
( 10 Marks)
- (b) Discuss the different approaches to work measurement indicating the advantages and disadvantages of each approach.  
( 15 Marks)

**QUESTION FOUR**

The service sector provides a special challenge to the accurate measurement of productivity and productivity improvement.

- (a) Why does productivity of the service sector prove difficult to improve?  
( 13 Marks)
- (b) Draru works in Rubaga restaurant and serves food to 44 customers in three(3) hours.
- (i) What is her productivity? ( 6 Marks)
  - (ii) If she drinks Redbull, she serves 50 customers using the same time. What is the increase in her productivity? ( 6 Marks)

## QUESTION FIVE

- (a) What is capacity management? ( 5 marks)
- (b) The weekly days sales for beers( crates) in Nkozi Common Room have been as follows:

Weekly Days	Monday	Tuesday	Wednesday	Thursday	Friday
Sales ( crates)	18	19	16	18	20

Required:

- (i) Derive the linear trend equation for the beer sales above. ( 8 Marks)
- (ii) What is the forecasted sales (crates) for beers for Saturday assuming the current linear trend continues. ( 4 Marks)
- (iii) What is the forecasted sales ( crates) for beers for Saturday using a two-days moving average. ( 4 Marks)
- (iv) What is the forecasted sales ( crates) for beers for Saturday using naive approach. ( 4 Marks)

## QUESTION SIX

- (a) Using product life cycle of a physical product, when would over capacity and under capacity be important in an organisation. ( 5 Marks)
- (b) A producer of pottery is considering the addition of a new plant to absorb the backlog of demand that now exists. The primary location being considered will have fixed costs of \$ 9,200 per month and variable costs of 70 cents per unit produced. Each item is sold to retailers at a price that averages 90 cents.

Required:

- (i) Determine the profit function. ( 5 marks)
- (ii) What volume per month is required in order to break-even? ( 5 Marks)
- (iii) What profit / loss would be realized on a monthly volume of 61,000 units? ( 5 Marks)
- (iv) What volume would be needed to realize a monthly profit of \$ 16,000? ( 5 Marks)

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