# UGANDA MARTYRS UNIVERSITY FACULTY OF BUSINESS ADMINISTRATION AND MANAGEMENT

## PRODUCTION OPERATIONS MANAGEMENT (SUPPLEMENTARY/ SPECIAL)

**Examination** 

2013 - 2014

### **BAM II - NKOZI CAMPUS**

Date: 08<sup>th</sup> / 08/ 2014

Time allowed: 3 hours

#### Instructions

- 1. Do not write anything on the question paper
- 2. Attempt any four questions

#### **QUESTION ONE**

(a) In UMU Rubaga campus a Piece Rate system is employed in paying lecturers, whereby every lecture of one hour delivered Shs 50,000 is paid. What is the likely monthly payment to the POM lecturer who offered 43 hours last month?

(7 Marks)

(b) Discuss the three major approaches to job design in operations management.
(18 Marks)

#### **QUESTION TWO**

UMU is considering opening up a second branch in Kampala. Two sites have been identified to have the following facts: The fixed costs for site A are \$ 500,000 and \$ 700,000 for site B. The variable cost for Site A is \$ 120 and \$ 100 for site B. The revenue generated by each student is \$ 200.

(i) Define Break-even point.

(4 Marks)

(ii) What is the break-even point in units for each site?

(7 Marks)

(iii) At what number of students would the two sites yield the same profit?

(7 Marks)

(iv) If the expected number of students is 8,500 students, which site should be chosen? (7 Marks)

#### **QUESTION THREE**

(a) What is Production / Operations Management (POM)?

(7 Marks)

(b) Explain the contribution of the following Scholars to the field of <u>Production / Operations Management (POM):</u>

Henry Ford and Charles Sorensen(1913) (6 Marks)
Walter Shewhart (1924) (6 Marks)
W. Edwards Demings (1950) (6 Marks)

#### **QUESTION FOUR**

Production and Operations decisions directly affect the size, shape, quality, quantity, prize, profitability and speed of delivery of companies' output, whether the organization produces a good or provides a service.

(a) Discuss the five Ps of POM.

(15 Marks)

(b) Explain the various roles of the Operations Manager.

(10 Marks)

#### **QUESTION FIVE**

The concept of quality does not have a standard definition but can be explained from some perspectives.

(a) Why is quality important?

(5 Marks)

(b) What is Total Quality Management (TQM)

(5 Marks)

(c) Discuss the five (5) concepts for effective Total Quality Management (TQM) program. (15 Marks)

#### **QUESTION SIX**

(a) What is capacity planning?

(5 Marks)

(b) The operations manager of Hardware World has noted a sales / demand pattern for window locks that seems to parallel the number of break-ins reported each week in the local newspapers. The data on which she bases her argument are:

	Τ	-	2	6	1	7	2	6
No. of break-ins reported (x)	9	)	3	)	7	<u> </u>		0
Sales / demand ( y )	46	18	20	22	27	34	14	37

(i) Assuming a linear relationship exists; obtain the regression equation for the data.
(10 Marks)

(ii) Forecast the Sales / demand if the reported number of break-ins for some week is 8. (5 Marks)

(iii) If the sales / demand is 50 locks. What is the number of break-ins? (5 Marks)