UNIVERSITY of RWANDA

COLLEGE OF BUSINESS AND ECONOMICS

FINAL EXAMINATION

BBA, YEAR 3 DAY & EVENING, SEMESTER: 2, AY: 2018-2019,

MAX. TIME: 2hrs, MAX MARKS: 50 MARKS, CREDITS: 10

MODULE TITLE: PRODUCTION & OPERATIONS MANAGEMENT

MODULE CODE: PCM 3232

DATE: 18TH JUNE 2019

INSTRUCTIONS:

- Write your full identification on the answer booklet provided.
- The paper has three sections. Follow the instructions.
- Cheating cases are seriously punished by academic regulation of UR.

SECTION A: Choose any ONE question (10 Marks)

Question 1: Use the right words to fill in the following gaps.**(10 marks)**

a) ..... inventory refers to a Japanese system of minimizing waste of production costs.

b) .....refers to the physical arrangement of plant facilities.

c) .....is a management philosophy that seeks to focus on meeting customer needs and organizational objectives.

d) .....refers to the key tool for business environmental scanning.

e) Breakeven point is a point where Total costs are equal to.....

Question 2: Briefly explain the following terms used in Production and Operations Management. **(10 marks).**

(a) Concurrent engineering

(b) Economic order quantity

(c) Service blueprinting

(d) Sequential design

(e) Batch production

SECTION B: Compulsory questions (20 Marks)

Question 3: Describe five components of SIX SIGMA (**5 marks)**

Question 4: Using EOQ, show/calculate the quantity of raw materials to order when the annual demand is 800 units, cost for holding is $0.30 per year, ordering cost is $8 per order, and purchase per unit is $5 **(5 marks)**

Question 5: HIGO Ltd Company is operating in Western Province with the following data (**10 marks)**:

Details	**Amount (USD)**
Output in Kgs	**150,000,000**
Labor (worked hours)	**30,000,000**
Raw materials (currency)	**75,000,000**
Capital equipment (worked hours)	**100,000,000**

Required:

a) Calculate partial labor and capital productivity figures for the HIGO Ltd.

b) Compute the multifactor productivity figures for labor and capital together.

c) Calculate raw material productivity figures

SECTION C: Choose any TWO questions (20 Marks)

Question 6: (10 marks)

a) Graphically describe a product life cycle.

b) What are the key steps undertaken in product design?

Question 7: What is the purpose of Material Requirement Planning (MRP)? Describe the key inputs and output of MRP. **(10 marks)**

Question 8: Outsourcing is a key function in supply chain management. Examine the need or reasons for outsourcing. **(10 marks)**

Question 9:

What is the role of scorecard in Production and Operations management? Explain four components of the score card. **(10 marks)**

END