



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF BUSINESS & ECONOMICS
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
LOGISTICS AND SUPPLY CHAIN MANAGEMENT
3RD YEAR 1ST SEMESTER 2018/2019 ACADEMIC YEAR
MAIN

COURSE CODE: BLM 3311

COURSE TITLE: PRODUCTION AND OPERATIONS MANAGEMENT

EXAM VENUE: STREAM: (BLM)

DATE: EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer questions ONE and ANY other TWO questions**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

Question One (30marks)

- a) Differentiate between productions management and operations management. Give an example in each case. **(4marks)**
- b) Outline Three components of the scope of Productions/Operations management **(3marks)**
- c) List two examples of the following corporate strategies **(4marks)**
 - i) Growth strategy
 - ii) Retrenchment strategies
- d) State five attributes of world class manufacturing that is aimed at fulfilling customer demand **(5marks)**
- e) Explain the difference between Value Analysis and Value Engineering **(2marks)**
- f) Explain the meaning of the following concepts
 - i) Purchasing **(2marks)**
 - ii) Procurement **(2marks)**
 - iii) Logistics **(2marks)**
- g) Briefly describe the following terms as used in productions management
 - i) Aggregate planning **(1mark)**
 - ii) Master production schedule **(1mark)**
 - iii) Material requirement planning **(1mark)**
 - iv) Just-in-time **(1mark)**
 - v) Bill of materials **(1mark)**
 - vi) Learning curve **(1mark)**

Question Two (20marks)

- a) Discuss the important trends in production/operations management **(5marks)**
- b) Explain five factors to be consider for a good layout **(5marks)**
- c) The following data relates to a particular stock item

Normal usage	120 per day
Minimum usage	60 per day
Maximum usage	150 per day
Lead time	26 – 32 days
Order quantity	8000 units

- Using the given data, compute the following **(10marks)**
- i) Re-order level

- ii) Minimum level
- iii) Maximum level

Question Three (20marks)

- a) Explain Four steps to be followed in designing a process **(8marks)**
- b) Outline Three advantages and Three disadvantages of product layout **(6marks)**
- c) How is process capability related to the tolerance specification **(6marks)**

Question Four (20marks)

- a) State the steps to be undertaken in procurement life cycle **(7marks)**
- b) State Ohno's seven wastes **(7marks)**
- c) Outline Six advantages of product standardisation **(6marks)**

Question Five (20marks)

- a) Highlight Five factors to be considered in facility location **(10marks)**
- b) You are given the following information about a certain project

Activity	Preceding activity	Activity Duration (days)
A	E	7
B	A	3
C	B	4
D	B	16
E	-	16
F	E	2
G	F	3
H	A	4
I	F	2
J	C, G, H	3
K	D, I, J	6

Required:

- i) Draw the network diagram for the project
- ii) Determine the critical path and state the least time of the project completion **(10marks)**

