



TECHNICAL UNIVERSITY OF MOMBASA
School of Business

DEPARTMENT OF BUSINESS ADMINISTRATION
UNIVERSITY EXAMINATIONS FOR DEGREE IN
BACHELOR OF COMMERCE

BPC 4402: MATERIALS PRODUCTION, PLANNING AND CONTROL

END OF SEMESTER EXAMINATIONS

SERIES: MAY 2016

TIME: 2 HOURS

Instructions to Candidates

You should have the following for this examination

- *Answer Booklet*
- *Examination Pass*
- *Student ID*

This paper consists of five questions in TWO sections A & B

Attempt question ONE (Compulsory) and any other TWO questions

This paper consists of TWO printed pages

Do NOT write on the question paper

Mobile phones are NOT allowed in the examination room

QUESTION 1 (Compulsory)

Assumed you have been asked by Sollozzo Ltd to provide them with consultative work on their new gypsum production factory in Mombasa County.

- a) Highlight to Sollozzo Ltd the production planning steps that they should follow. **(4 marks)**
- b) State the 5P's of production that you will advise them. **(5 marks)**
- c) Explain to the company Production Manager the **FOUR** types/classifications of inventory that the company will handle. **(4 marks)**
- d) State and explain to Sollozzo Ltd the 5's approach used in lean manufacturing. **(5 marks)**
- e) Briefly explain to the company the phases through which a project will undergo in any organization. **(6 marks)**
- f) At Sollozzo Ltd, it is paramount that several dimension of managing quality be observed in order to meet customers expectations. Briefly explain the observed quality dimension. **(6 marks)**

QUESTION 2

- a) In production, materials planning and control, strategic capacity planning involves the long range planning which helps to specify overall capacity level resources. Discuss the **FIVE** planning concepts commonly used in production. **(10 marks)**
- b) i) What do you understand by DMAIC methodology developed by General Electric as an approach to Six sign quality. **(5 marks)**
- ii) Highlight at least **FIVE** benefits of implementing ISO Certification standards in a production plant. **(5 marks)**

QUESTION 3

- a) i) Distinguish between independent demand and dependent demand. **(4 marks)**
- ii) Distinguish between continuous demand and occasional demand. **(4 marks)**
- b) Define the term forecast with respect to demand and discuss its characteristics. **(12 marks)**

QUESTION 4

- a) Define the following terms as used in production, planning and control:
- i) Experts survey method
 - ii) Sample survey method
 - iii) Aggregate planning
 - iv) Inventory
 - v) Holding/carrying costs
 - vi) Re-order level in stock
 - vii) The hastening stock level. **(14 marks)**
- b) i) State the **FOUR** primary tools used in lean manufacturing. **(4 marks)**
- ii) Why is planning necessary before we embark on production? **(2 marks)**

QUESTION 5

- a) Discuss at least **FIVE** reasons that necessitate keeping of inventory in a manufacturing firms. **(10 marks)**
- b) Discuss the following inventory management tools:
- i) JIT **(3 marks)**
 - ii) JIT II **(2 marks)**
- c) State the main barriers to the successful operation of the JIT system. **(5 marks)**