

TECHNICAL UNIVERSITY OF MOMBASA
SCHOOL OF BUSINESS DEPARTMENT OF MANAGEMENT SCIENCE
PAPER B (FEB-MAY 2016)
END OF SEMESTER EXAMINATION QUESTIONS
COURSE CODE AND TITLE: BPC 4402 MATERIALS PLANNING,
PRODUCTION AND CONTROL
CLASS: BCOM (PROCUREMENT OPTION) YEAR 4

INSTRUCTIONS:

- i. Answer question one and any other two questions
- ii. Do not write on the question paper
- iii. Time allowed is 2 hours

QUESTION ONE

The following purchases were made at Shimoni Limited:

Date of purchase	Units purchased	Price/unit
1 st January	500	100
2 nd January	600	200
3 rd January	800	400

Units used on 4th January are 900. Determine the value/cost of units used by using FIFO, LIFO and weighted average.

Required:

Determine the cost of units used and the value of the closing stocks using

- i. First in First Out (FIFO) method (10 marks)
- ii. Last in First Out (LIFO) Method (10 marks)
- iii. Weighted Average method (10 marks)

QUESTION TWO

- a) What is production planning? Explain the main activities in production planning (10 marks)
- b) Production control refers to the updating and reviewing of procedures, where according to the requirements of implementation, the labour assignment, the machine assignments, the job priorities, the line speeds, the production routes and so on may be revised. With examples, discuss the features of an effective production control system (10 marks)

QUESTION THREE

- a) Explain how the 5s-workplace organization is used as a primary tool in lean manufacturing (10 marks)
- b) Lean manufacturing has a few basic rules that need to be followed in case an organization wishes to implement lean. Following these rules helps an organization to implement lean manufacturing without any difficulty and in less time. Clearly explain the basic lean manufacturing rules in an organization (10 marks)

QUESTION FOUR

- a) Explain the factors that influence the choice of a production facility location (8 marks)
- b) Advise the management of your organization how they can use the factor rating system in determining the location of their new production facility (12 marks)

QUESTION FIVE

- a) Explain the use of the following designs in the technological innovation process:
 - i. Experimental design (4 marks)
 - ii. Fashion design (4 marks)
 - iii. Engineering design (4 marks)
- b) Discuss with examples, the use of the following modern production techniques:
 - i. Computer Aided Design (CAD) (4 marks)
 - ii. Computer aided Manufacturing (CAM) (4 marks)