



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

**FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE (MANUFACTURING ENGINEERING)**

SET 509: MANUFACTURING MANAGEMENT

DATE: Tuesday 29th November 2011

TIME: 8.00a.m – 10.00a.m

INSTRUCTIONS TO THE CANDIDATES: Answer all questions in SECTION ONE and ONE question from SECTION TWO

SECTION ONE

Answer all questions in this section

1. It has been noticed and reported in Kenyan Dailies that majority of engineers seeking further education in institutions of higher learning are registering for degree programmes in management areas. Majority of those requested to comment say that it is for the purpose of seeking promotion to management levels in engineering firms given that management level employees tend to be those with management related skills and less of engineering know how. Giving your own opinion
 - a) Explain what would be the scope of work for a manager in a manufacturing firm.
[8 marks]
 - b) Discuss what you suppose to be the management tasks for a machine shop Foreman.
[12 marks]
2. There should be no mistake about the fact that productive companies have rules and procedures, nevertheless, in manufacturing firms, firm central control systems and directions coexists with maximum individual autonomy. For example when Katerina became the CEO of Dana Manufacturing Company, she threw out all of the company's

policy manuals. In their place, she substituted a one-page philosophy statement and a control system that required all divisions to report materials requisitions, inventory and production accomplishments each day. Discuss

- a) Types of management control systems. [6 Marks]
- b) How control process can effectively be carried out in an organization. [8 Marks]
- c) Methods of organizational control. [8 Marks]

SECTION TWO

Instructions: Attempt only one question from this section

3. A major Kenyan manufacturing corporation identifies a cash flow problem. Further analysis reveals that inventory levels are high and turnover below most major competitors in addition to a technology change and a proliferation of model products. The corporate goal is a reduction of inventory across the order fulfillment process in excess of 50% with no negative impact on service levels. Customer feedback reveals that key to customer satisfaction is on-time-delivery and any deviation from promised dates has a negative impact on customer satisfaction.
- a) Explain how the principles of Economic Order Quantity system can effectively be applied in this situation. [6 Marks]
 - b) What would be the result of applying MTO inventory system? [4 Marks]
4. The work of management is guided principally by three schools of thought. Discuss how the fundamentals of the following precepts deviate from or approach Classical, behavioural and management science thoughts:
- a) Systems approach [5 Marks]
 - b) Contingency approach [5 Marks]
5. a) Using systems theory models of decision-making differentiate explain the four key areas that determine the relative difficulty of a decision. [4 Marks]

b) Basing your discuss on what you have learnt from the Manufacturing Management course, elucidate how Group Manufacturing Technology would benefit from the application of the following with skills

i. EMQ inventory control system [3 Marks]

ii. Feedback decision making process [3 Marks]

