



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF INDUSTRIAL TECHNOLOGY

DEPARTMENT OF INDUSTRIAL AND MANUFACTURING ENGINEERING

Master of Engineering in Manufacturing Systems/Engineering and Operations Management

OPERATIONS MANAGEMENT

TIE 6134

First Semester Supplementary Examination Paper

August 2015

This examination paper consists of 3 pages

Time Allowed: 3 hours

Total Marks: 100

Special Requirements: None

Examiner's Name: Eng. William M. Goriwondo

INSTRUCTIONS

1. Answer any five (5) Questions.
2. Each question carries 20 marks
3. Use of calculators is permissible

MARK ALLOCATION

QUESTION	MARKS
1.	20
2.	20
3.	20
4.	20
5.	20
6.	20
7.	20
TOTAL	140

Question 1

- a) Critically analyse the ways a business can be said to be growing. [8]
- b) Define the three main elements of Operations Management that are the foundation for growth. [12]

Question 2

Discuss the critical aspects that cause conflict in the competitive priorities of an organisation and how they can be resolved. [20]

Question 3

- a) How does “growth of the service sector” impact on Operations Management? [5]
- b) Discuss in detail the factors that affect Today’s Global Business Conditions. [15]

Question 4

Explain the following elements of an Operations Strategy; given appropriate industrial instances.

- a) Positioning the Production System, [4]
- b) Focus on Production, [4]
- c) Production Process and Technology plans, [4]
- d) Allocation of resources to strategic alternatives. [4]
- e) Facility Plans [4]

Question 5

Describe the major phases of the Product Life Cycle and how each phase impacts on the development of an Operations Strategy. [20]

Question 6

- a) Discuss the main phases of a project. [10]
- b) Describe the relationships that exist in a Project Triangle and the principle of the triple constraint . [10]

Question 7

- a) How is the Product Position grid used in Supply Chain Management? [5]
- b) Explain how “Managing Supply Chain Information” would help organisations improve. [5]
- c) In order to forge supply chain partnerships, it is recommended that organisation do an analysis of their motivation to develop partnerships. Discuss the types of partnerships that an organisation can engage in and their motivation to do so. [10]

End of Examination