



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF BUILDING & CIVIL ENGINEERING
UNIVERSITY EXAMINATION FOR:
BACHELOR OF SCIENCE IN CIVIL ENGINEERING

ECE 2507: LOGISTICS AND SYSTEMS ANALYSIS IN TRANSPORTATION
SPECIAL/SUPPLEMENTARY EXAMINATION
SERIES: SEPTEMBER 2018
TIME: 2 HOURS

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of five questions.

Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

QUESTION ONE (COMPULSORY) 30 Marks

- (a) Explain the three important issues that are concerned with the development of a suitable strategy in the logistics arena
(12 Marks)
- (b) Briefly describe the factors that dictate the design of warehouses and handling systems and outline the steps involved in the design process
(8 Marks)
- (c) Describe the steps followed in hiring temporary staff in a newly established logistics firm.
(10 Marks)

ANSWER ANY TWO QUESTIONS

QUESTION TWO (20 Marks)

- (a) Explain in details the roles played by a logistics manager in any logistics firm (14 Marks)
- (b) briefly explain “logistics as used in transportation (6 Marks)

QUESTION THREE (20 Marks)

- (a) Name and briefly explain the main elements of logistics (10 Marks)
- (b) Name and explain the policy measures that affect logistics in East Africa (10 Marks)

QUESTION FOUR (20 Marks)

- (a) Explain in details the logistics concept (8 Marks)
- (b) Describe the following types of lifting equipments:-

- (i) Reach stack
- (ii) Gripper lift (6 Marks)

- (c) With respect to transportation operations briefly describe the following:-

- (i) Fixed costs
- (ii) Variable costs (6 Marks)

QUESTION FIVE (20 Marks)

- (a) Differentiate between logistics and supply chain management (10 Marks)
- (b) Briefly describe the road-railer as used in the construction of railways (10 Marks)