



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT BUILDING AND CIVIL ENGINEERING

UNIVERSITY EXAMINATION FOR:

BSC IN CIVIL ENGINEERING

ECE 2308: TRANSPORTATION PLANNINGS AND

DEVELOPMENT

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 2 HOURS

DATE: 12 May 2016

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, Drawing Instruments, Scientific calculator, examination pass and student ID

This paper consists of five questions. Attempt question ONE (Compulsory) and any other TWO questions.

Section A compulsory

Question one

- a) With the aid of a sketch describe the transportation process. **(6marks)**
- b) Transportation impacts negatively on the environment. In relation to this explain how it impacts on the following:
 - i) Accidents
 - ii) Traffic jams
 - iii) Air quality
 - iv) Climate **(14marks)**
- c) Explain the following methods used to collect traffic data:
 - i) Home interviews



- ii) Road side interviews
- iii) Post card interviews
- iv) License plate interviews

(10marks)

Section B: answer two questions

Question two

- a) In relation to transportation explain the transportation system and name four elements that constitute transport. **(10marks)**
- b) With the aid of a sketch describe bundling as used in transportation. **(5marks)**
- c) Describe public transportation as used to transport people. **(5marks)**

Question three

- a) Describe the FIVE steps that are followed in a rational transportation planning. **(20marks)**

Question four

There are four main techniques used in allocating trips in traffic networks name and explain them. **(20marks)**

Question five

Explain the evolution of transportation **(20marks)**

