



MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

UNIVERSITY ORDINARY EXAMINATION

2018/2019 ACADEMIC YEAR

**THIRD YEAR SECOND SEMESTER EXAMINATION FOR, DIPLOMA IN
CIVIL ENGINEERING**

SEB 1338 - TRANSPORTATION II

DURATION: 2 HOURS

DATE: 20/12/2018

TIME: 9 - 11 A.M.

Instructions to candidates:

1. Answer question One and Any Other Two questions.
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE (30 MARKS)

- a. Define the following terms as used in transportation engineering;
- i. Wagon
 - ii. Coaches
 - iii. Wet dock
 - iv. Dry dock (8 Marks)
- b. State the advantages and disadvantages of railways transportation as compared to road transportation (6 Marks)
- c. Differentiate between displacement light and displacement load (4 Marks)
- d. Highlight FOUR routine maintenance that is carried out on a railway line (4 Marks)
- e. Using a well illustrated sketches, describe the following types of rail joints;
- i. Supported joints
 - ii. Suspended joints (4 Marks)
- f. State the factors to consider when selecting a site for airports (4 Marks)

SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)

- a. State the requirements of a good airport (4 Marks)
- b. Discuss the maintenance of a flexible airfield pavement (16 Marks)

QUESTION THREE (20 MARKS)

- a. Differentiate between a harbor and a port (6 Marks)
- b. Explain the drawbacks of ocean transportation (14 Marks)

QUESTION FOUR (20 MARKS)

- a. Explain different Ballast material that are used in railway line (8 Marks)
- b. Using well illustrated sketches, discuss the different types of crossing in railway line (12 Marks)