



**UNIVERSITI KUALA LUMPUR  
MALAYSIAN INSTITUTE OF INDUSTRIAL TECHNOLOGY**

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**FINAL EXAMINATION  
JANUARY 2016 SEMESTER**

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**COURSE CODE : JLD 20603**  
**COURSE TITLE : TRANSPORTATION AND ENVIRONMENT**  
**PROGRAMME LEVEL : DIPLOMA**  
**DATE : 26 MAY 2016**  
**TIME : 2.30 PM – 5.30 PM**  
**DURATION : 3 HOURS**

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**INSTRUCTIONS TO CANDIDATES**

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- 1. Please read the instructions given in the question paper CAREFULLY.**
  - 2. This question paper is printed on both sides of the paper.**
  - 3. This question paper consists of TWO (2) sections.**
  - 4. Answer ALL questions in Section A. Choose TWO (2) questions in section B.**
  - 5. Please write your answers on the answer booklet provided.**
  - 6. Please answer all questions in English only.**
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**THERE ARE 3 PAGES OF QUESTIONS EXCLUDING THIS PAGE.**

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**SECTION A (Total: 60 marks)**

**INSTRUCTION: Answer ALL questions.**  
**Please use the answer booklet provided.**

**Question 1**

Almost all countries in the world are depending on road transportation in moving people and freight as it offers door to door services and relatively low cost. Unfortunately it has its own disadvantages particularly in safety issues.

Explain **FIVE (5)** safety measures or devices in road highway system aimed to increase safety awareness among the users.

(15 marks)

**Question 2**

There are many laws, regulation and organization concerning transportation and environment. Elaborate how each one of those below could influence transport activity particularly in Malaysia:

- a) Malaysia Maritime Enforcement Agency (MMEA)
- b) Malaysian Institute of Road Safety Research (MIROS)
- c) Environmental Quality Act 1974

(15 marks)

**Question 3**

Transportation is identified as one of major human activity that uses vast world energy.

Elaborate **THREE (3)** alternative sources of energy as an additional to the fossil fuel source of energy in transportation, which is currently being consumed.

(15 marks)

**Question 4**

Vibration from heavy has become a critical problem especially in urban transportation. Define vibration caused by heavy vehicles and elaborate the source of vibration. Explain how to reduce vibration caused by heavy vehicles.

(15 marks)

**SECTION B (Total: 40 marks)**

**INSTRUCTION: Answer TWO (2) questions only**  
**Please use the answer booklet provided.**

**Question 1**

Transportation is known for its major negative contribution to 'Greenhouse Effect' which lead to global warning to the world.

Discuss the 'Greenhouse Effect' in relation to transportation and identify gases in the atmosphere which specifically related to it. Explain **TWO (2)** measures for a road freight transportation company to reduce such negative impact to the environment in its operation.

(20 marks)

**Question 2**

Air transportation is the fastest way to transport people and freight in long distance around the world. Unfortunately, it also produces harmful effects to the society.

Define the airplane pollution and discuss the source of air pollution.

(20 marks)

**Question 3**

According to World Health Organization Standard (WHO), 55 dB (A) is the suggested standard for noise in any part of the world. Referring to the above diagram, transportation is clearly a major source of noise pollution to the environment.

Discuss on the reasonable measures to reduce noise impact to transport users.

[20 marks]

**END OF EXAMINATION PAPER**