



**UNIVERSITI KUALA LUMPUR  
MALAYSIAN INSTITUTE OF MARINE ENGINEERING TECHNOLOGY**

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**FINAL EXAMINATION  
MARCH 2025 SEMESTER**

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**COURSE CODE : LOB20403**  
**COURSE TITLE : INTEGRATED TRANSPORT SYSTEM**  
**PROGRAMME NAME : BACHELOR OF MARITIME OPERATIONS (HONS)**  
**DATE : 28 JUNE 2025**  
**TIME : 9:00AM - 12:00PM**  
**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 consist of **ONE** sections.
4. Section A consist of five questions. Answer **FOUR (4)** questions only.
5. Please write your answer on the answer booklet provided.
6. Please answer all questions in English only.
7. Refer to the attached Formula/ Appendies.  *Tick if applicable*

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**THERE ARE 3 PAGES OF QUESTIONS INCLUDING THIS PAGE**

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**SECTION A (Total: 100 marks)**

**Answer FOUR (4) questions.**

**Please use the answer booklet provided.**

**Question 1**

Traditional transport modes, such as road, rail, air, and maritime, play a critical role in global logistics and mobility. However, they also contribute significantly to environmental degradation. In 2025, the global trade industry is undergoing a significant digital transformation, leveraging advanced technologies to enhance efficiency, transparency, and security and ensure compliance with complex global trade regulations.

Discuss the major environmental effects of traditional transport modes.

(25 marks)

**Question 2**

As global trade grows, urbanization accelerates, and sustainability becomes a top priority, integrated transport systems are evolving to meet both current challenges and future demands. The development of these systems is shaped by factors such as congestion, infrastructure, digital technologies, environmental considerations, and fuel efficiency.

Discuss the role of information technology in enhancing integrated transport systems.

(25 marks)

**Question 3**

The maritime industry is facing a pivotal year in 2025, with global trade lanes undergoing dramatic shifts. From the rise of LNG shipments reshaping energy corridors to the Suez Canal's latest expansion and decarbonization policies driving fleet innovations, shipowners and fleet operators must adapt to survive and thrive. These changes are not just headlines; they're altering the very flow of goods and the strategies needed to navigate global shipping.

Discuss the changes in global trade patterns affect international freight flows.

(25 marks)

**Question 4**

In recent years, the global focus on sustainability has intensified, and the logistics sector is undergoing a profound transformation. With rising demand for efficient and cost-effective transportation, the need for green logistics has never been more urgent. The transition toward ecological and innovative transport technologies not only aims to mitigate environmental impact but also presents valuable opportunities for economic growth and long-term competitiveness.

- (a) Justify the governments' and logistics firms' reduction of transport emissions.  
(15 marks)
- (b) Suggest the future developments that could make integrated transport greener.  
(10 marks)

**Question 5**

In today's complex global supply chains, multi-modal transport has become a strategic necessity. As international trade continues to expand, logistics providers are under increasing pressure to deliver faster, cheaper, and more sustainable services. Multi-modalism enables this by reducing transit times, minimizing cargo handling, improving reliability, and enhancing connectivity between ports, hinterlands, and final markets.

- (a) Discuss the factors that favour the growth and adoption of multi-modalism in global transportation.  
(15 marks)
- (b) Propose a strategic approach for implementing multi-modalism in a developing maritime economy.  
(10 marks)

**END OF EXAMINATION PAPER**