



**UNIVERSITI KUALA LUMPUR**  
**Malaysian Institute of Marine Engineering Technology**

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**FINAL EXAMINATION**  
**MARCH 2025 SEMESTER SESSION**

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**SUBJECT CODE** : LND10402

**SUBJECT TITLE** : SHIP TECHNOLOGY

**PROGRAMME NAME** : DIPLOMA OF ENGINEERING TECHNOLOGY (NAVAL ARCHITECTURE AND SHIPBUILDING)  
(FOR MPU: PROGRAMME LEVEL)

**TIME / DURATION** : 09.00 AM - 11.00 AM  
(2 HOURS)

**DATE** : 30 JUNE 2025

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**INSTRUCTIONS TO CANDIDATES**

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1. Please read **CAREFULLY** the instructions given in the question paper.
2. This question paper has information printed on both sides of the paper.
3. This question paper consists of **TWO (2)** sections, Section A and Section B.
4. Answer **ALL** question in Section A, and **TWO (2)** questions **ONLY** in Section B.
5. Please write your answers on this answer booklet provided.
6. Answer **ALL** questions in English language **ONLY**.
7. Answer should be written in blue or black ink except for sketching, graphics and illustration.

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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**

- a) A ship is a large watercraft that travels on water, used for transporting goods, people, or for military purposes. Ships are typically larger than boats, and are designed for deep-water navigation, including oceans and seas. They have various structural features and systems to ensure their functionality, such as a hull, deck, engine room, navigation equipment, and living quarters for the crew. Ships can be powered by different means, including sails, steam engines, or modern diesel engines. Describe the functions of the following ten types of ships:

- i. Cargo Ship
- ii. Tugboat
- iii. Container Ship
- iv. Chemical Tanker
- v. Cruise Ship
- vi. Battleship
- vii. Speed Boat
- viii. Fishing Vessel
- ix. Bulk Carrier
- x. Ro-Ro Ship

(20 marks)

**Question 2**

- a) Define the meaning of wind. (2 marks)
- b) Describe its significant impacts on the maritime activities. (8 marks)
- c) Explain the effects of iceberg on the maritime activities. (10 marks)

**Question 3**

- a) Describe the effects of waves on the maritime activities. (6 marks)
- b) Describe the effects of currents on maritime activities. (6 marks)
- c) Explain the effects of tides on the maritime activities. (8 marks)

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

**INSTRUCTION: Answer only TWO (2) questions.**

**Question 4**

- a) Define a shipyard. (2 marks)
- b) List and briefly describe the function of any SIX (6) main facilities commonly found in a modern shipyard. (18 marks)

**Question 5**

- a) Ship support systems are the various subsystems and equipment on a ship that ensure its safe and efficient operation. List and describe TWO (2) of these systems. (8 marks)
- b) The running costs to operate a ship can be divided into two categories: fixed costs and variable costs. List THREE (3) fixed costs and THREE (3) variable costs necessary for the smooth operation of the ship. (12 marks)

**Question 6**

- a) Shipbuilding materials can be classified into two main groups such as metallic and non-metallic
- i. Identify FIVE (5) materials from metallic group and state an example of part/equipment in boat/ship using those materials. (10 marks)
- ii. Explain the advantage of each material. (10 marks)

**END OF EXAMINATION PAPER**

