



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

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**FINAL EXAMINATION**  
**JANUARY 2016 SEMESTER**

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**COURSE CODE** : LOB 40203  
**COURSE NAME** : SEAPORT AND TERMINAL OPERATION  
**PROGRAMME NAME** : BACHELOR OF MARITIME OPERATIONS  
  
**DATE** : 23 MAY 2016  
**TIME** : 09.00 AM – 12.00 PM  
**DURATION** : 3 HOURS

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**INSTRUCTIONS TO CANDIDATES**

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1. Please CAREFULLY read the instructions given in the question paper.
2. This question paper has information printed on both sides of the paper.
3. Answer FOUR (4) questions ONLY.
4. Please write your answers on the answer booklet provided.
5. Answer all questions in English language ONLY.

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**THERE ARE 4 PAGES OF QUESTIONS, INCLUDING THIS PAGE.**

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**SECTION A (Total: 100 marks)****INSTRUCTION: Answer FOUR question ONLY.****Please use the objective answer sheet provided.****Question 1**

Seaport are areas where there are facilities for cargo handling equipment located for cargo transfer also facilities for berthing or anchoring ships. Port also refer as a ship and shore interface or a maritime intermodal interface with shipping activities.

- (a) Briefly, define the cargo throughput. (4 marks)
- (b) Discuss the importance of cargo throughput for port performance (6 marks)
- (c) Port efficiency determine the performance. Explain the factor that evaluate an efficiency of port productivity. (15 marks)

**Question 2**

Sustainability is key to preserving the environment where the approaches of green port are promoted by International Maritime Organization worldwide.

- (a) Briefly, determine the term of sustainability in port development (5 marks)
- (b) The master plan of a port allocates the land within the port to the various uses required, describes the projects needed to implement the plan, and gives an indicative implementation scheme by development phase. Explain the port planning at individual level and terminal level for port development. (20 marks)



**Question 3**

Demand in transportation composed of suppliers of transport services and users of these services. Well-functioning in transport allow transport supply to meet transport demand so that transport needs for mobility are satisfied.

- (a) Briefly, explain the direct and indirect service in global freight flow  
(6 marks)
- (b) Explain the types and characteristic of bulk rail commonly used in intermodal.  
(15 marks)
- (c) Explain an advantages of pipeline system rather than road network in intermodal  
(4 marks)

**Question 4**

Ports can be classified as to their type of ownership or administration model. Port privatization can be either comprehensive or partial depends on the model concept.

- (a) Briefly, define the following terminologies:
  - i. Privatization
  - ii. BOT Scheme
  - iii. Tools port  
(9 marks)
- (b) Discuss the strength and weaknesses of fully privatization model and explain the model of Port Klang as a case study.  
(16 marks)



**Question 5**

The hub-and-spoke transport concept is predicated on transshipment of commodities from one marine vessel to another also feeder and short sea of commodities via marine transport to other regional ports

- (a) Briefly, describe the categories of the short sea service  
(9 marks)
- (b) Port regionalization evaluation in line with the growth of containerization revolution that used in hub and spoke. Evaluate the phase of port regionalization in port system.  
(16 marks)

**Question 6**

Inter port competition arises when two ports in the same or in different countries compete for the same cargo. For example, in the South Asian region, the port of Colombo is competing with Singapore, Tanjung Pelepas and Dubai. The scale of inter port competition often depends on the size of the hinterland of the concerned ports.

- (a) Briefly, explain the following terminologies in port competition:
  - i. Horizontal competition
  - ii. Vertical competition  
(10 marks)
- (b) Discuss three (3) key factor affecting port competition at Singapore Port and Tanjung Pelepas Port as a case study.  
  
(15 marks)

**END OF EXAMINATION PAPER**

