



UNIVERSITY OF
PLYMOUTH

FINAL EXAMINATION

Programme Name	:	BSC (HONOURS) MARITIME BUSINESS & LOGISTICS 3+0 IN COLLABORATION WITH UNIVERSITY OF PLYMOUTH
Course Code & Name	:	MAL2014 MARITIME OPERATIONS
Duration	:	3 HOURS

INSTRUCTIONS TO CANDIDATES:

1. Please read the instructions given in the question paper **CAREFULLY**.
2. The question paper consists of **FOUR (4)** questions.
3. Answer **ALL** questions in the question paper.
4. Answers to the questions are to be written into the examination booklet.
5. Electronic dictionaries, lecture notes, files or any unauthorised materials except writing equipment are strictly prohibited.

This question paper must be submitted along with all used and/or unused rough papers and/ or graph papers (if any). Candidates are **NOT ALLOWED** to take any examination paper(s) used or unused out of the examination hall.

WARNING:

The Examination Board of Peninsula College Georgetown regards cheating as a very serious offence and will not hesitate to mete out the appropriate punitive actions according to the severity of the offence committed, and in the accordance with the clauses stipulated in the Students' Handbook, up to and including expulsion from Peninsula College Georgetown.

(This booklet contains 2 printed pages including this page)

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ALLOWED TO DO SO

Answer **ALL** questions on the separate sheet provided.

[100 marks]

1. a) Explain the duties and responsibilities of the Ship Security Officer (SSO) according to the Ship Security Plan. (10 marks)

- b) A Ship Security Assessment (SSA) is a critical process that helps ensure the safety and security of a vessel, its crew, passengers, and cargo. Discuss **FIVE (5)** considerations when conducting Ship Security Assessments (SSA). (15 marks)
Total: [25 marks]

2. a) Discuss **THREE (3)** potential hazards that may arise when carrying grain cargo. (9 marks)

- b) Explain the codes and regulations that are in place to reduce the hazards of carrying grain cargo. (10 marks)

- c) Explain the methods to avoid shifting of grain cargo. (6 marks)
Total: [25 marks]

3. a) Explain **FOUR (4)** objectives of the International Safety Management (ISM) Code in the maritime industry. (10 marks)

- b) Discuss the safety management system requirements that need to be fulfilled by every international commercial vessel according to the ISM Code. (15 marks)
Total: [25 marks]

4. a) Discuss the functions of ballast water in a commercial vessel. (9 marks)

- b) Ballast water may pose serious problems caused by invasive marine species and pathogens. Explain these problems with appropriate examples. (6 marks)

- c) Ballast Water Treatment Plants were introduced to prevent problems such as the spread of invasive marine species. Ship owners will be considering several factors when selecting Ballast Water Treatment Plants for their ships in compliance with international regulations. Give details of **FOUR (4)** factors that are considered by ship owners in the selection process. (10 marks)
Total: [25 marks]

- END OF QUESTIONS -