



UNIVERSITI KUALA LUMPUR
Malaysian Institute of Marine Engineering Technology

FINAL EXAMINATION
JANUARY 2016 SESSION

SUBJECT CODE : LGB 31103
SUBJECT TITLE : MARITIME LAW
LEVEL : DEGREE
TIME / DURATION : (3 HOURS)
DATE : 25TH MAY 2016

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
 2. This question paper is printed on both sides of the paper.
 3. Please write your answers on the answer booklet provided.
 4. Answer should be written in blue or black ink except for sketching, graphic and illustration.
 5. This question paper consists of TWO (2) sections; Section 'A' and Section 'B'. Answer all questions in Section 'A' and THREE (3) questions only from Section 'B'.
 6. Answer all questions in English.
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THERE ARE 3 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A (Total: 40 marks)**INSTRUCTION: Answer ALL questions.****Please use the answer booklet provided.****Question 1**

(a)

Article taken from IMO website:

Ballast water management - the control of harmful invasive species

Since the introduction of steel-hulled vessels around 120 years ago, water has been used as ballast to stabilize vessels at sea. Ballast water is pumped in to maintain safe operating conditions throughout a voyage. This practice reduces stress on the hull, provides transverse stability, improves propulsion and manoeuvrability, and compensates for weight changes in various cargo load levels and due to fuel and water consumption.

While ballast water is essential for safe and efficient modern shipping operations, it may pose serious ecological, economic and health problems due to the multitude of marine species carried in ships' ballast water. These include bacteria, microbes, small invertebrates, eggs, cysts and larvae of various species. The transferred species may survive to establish a reproductive population in the host environment, becoming invasive, out-competing native species and multiplying into pest proportions.

Scientists first recognized the signs of an alien species introduction after a mass occurrence of the Asian phytoplankton algae *Odontella* (*Biddulphia sinensis*) in the North Sea in 1903. But it was not until the 1970s that the scientific community began reviewing the problem in detail. In the late 1980s, Canada and Australia were among countries experiencing particular problems with invasive species, and they brought their concerns to the attention of IMO's Marine Environment Protection Committee (MEPC). The problem of invasive species in ships' ballast water is largely due to the expanded trade and traffic volume over the last few decades and, since the volumes of seaborne trade continue to increase, the problem may not yet have reached its peak yet. The effects in many areas of the world have been devastating. Quantitative data show that the rate of

bio-invasions is continuing to increase at an alarming rate and new areas are being invaded all the time. The spread of invasive species is now recognized as one of the greatest threats to the ecological and the economic well being of the planet. These species are causing enormous damage to biodiversity and the valuable natural riches of the earth upon which we depend. Direct and indirect health effects are becoming increasingly serious and the damage to the environment is often irreversible.

IMO has been at the front of the international effort by taking the lead in addressing the transfer of invasive aquatic species (IAS) through shipping. In 1991 the MEPC adopted the International Guidelines for preventing the introduction of unwanted aquatic organisms and pathogens from ships' ballast water and sediment discharges (resolution MEPC.50(31)); while the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, recognized the issue as a major international concern.

In November 1993, the IMO Assembly adopted resolution A.774(18) based on the 1991 Guidelines requesting the MEPC and the MSC to keep the Guidelines under review with a view to developing internationally applicable, legally-binding provisions. While continuing its work towards the development of an international treaty, the Organization adopted, in November 1997, resolution A.868(20) - Guidelines for the control and management of ships' ballast water to minimize the transfer of harmful aquatic organisms and pathogens, inviting its Member States to use these new guidelines when addressing the issue of IAS. After more than 14 years of complex negotiations between IMO Member States, the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) was adopted by consensus at a Diplomatic Conference held at IMO Headquarters in London on 13 February 2004. The Convention will require all ships to implement a ballast water management plan. All ships will have to carry a Ballast Water Record Book and will be required to carry out ballast water management procedures to a given standard. Parties to the Convention are given the option to take additional measures which are subject to criteria set out in the Convention and to IMO guidelines.

During the Convention development process, considerable efforts were made to formulate appropriate standards for ballast water management. They are the ballast water exchange standard and the ballast water performance standard. Ships performing ballast water exchange shall do so with an efficiency of 95 per cent volumetric exchange of ballast water and ships using a ballast water management system (BWMS) shall meet

a performance standard based on agreed numbers of organisms per unit of volume. The Convention requires a review to be undertaken in order to determine whether appropriate technologies are available to achieve the standard. List the issues and discuss the impacts of this issue towards Malaysian maritime industries.

(12 marks)

(b) List the current actions taken in solving maritime issues involving the implementation and enforcement of maritime laws in Malaysia.

(8 marks)

Question 2

(a) Define a muster list.

(2 marks)

(b) Caribbean Cruise Incident, 2009

"The Master looked at the engine-room closed circuit television (CCTV) monitor, located to the port side of his chair, which showed, alternately, the views from CCTV cameras located in the fore parts of both the port and starboard engine rooms. As the monitor switched from the starboard to port engine room, the Master saw flames rising up from the top of the port main engine. The fire detector panel indicated that there was a fire in the port engine room. At about the same time, fire alarm bells, situated in the passenger saloons, started to ring. Realizing that the port engine was on fire, the Master operated the selector switch on the panel in front of him to stop the fans and to close the fire dampers for the port engine-room. The port engine stopped immediately.

The Master made the following announcement on the public address system:

“Emergency Stations. Emergency Stations. Please go to Emergency Stations as we have a fire in the port engine room. Would you please get your lifejacket from under your seat and put your lifejacket on”.

The Master then activated the fixed fire installation carbon dioxide (CO₂) release control that was located on the bridge, thereby releasing CO₂ into the port engine room. At 1711 hours, the Master put out a distress call and message on VHF radio Channel 16, advising all stations that there was a fire in the port engine room and that the vessel was off the Motuihe Channel. The distress call was acknowledged by Auckland Maritime Radio, the Coastguard and several boats in the vicinity. Create a simple muster list according to this emergency situation (10 marks). List life-saving, personal safety equipment, fire prevention systems that should be added to this cruise to prevent any accident during this situation (8 marks).

(18 marks)

SECTION B (Total: 60 marks)

INSTRUCTION: Answer 3 (THREE) questions only.

Please use the answer booklet provided.

Question 3

(a) Define flag state.

(2 marks)

(b) Port state control officers may impose a detention on ships with major deficiencies, i. e. the ship must not leave the port of inspection. The ship is kept under detention until the rectification of all deficiencies has been verified by a port state control officer by means of a re-inspection. A ship is detained when it is unfit to proceed to sea or the deficiencies pose an unreasonable risk to the ship, its crew or the environment. As all deficiencies and required rectifications are entered into a database, other port states can check whether the deficiencies have been rectified. Explain the deficiencies for detention to be implemented complete with example.

(12 marks)

(c) **Accident case: Sea Angel – Crane failure**

On 31 October 2005 at approximately 1900 hours New Zealand Daylight Time (NZDT), whilst *Sea Angel* was loading logs at Nelson, New Zealand, the port jib arm of No.3 hydraulic crane detached from the crane's heel pin, causing serious damage to the jib of the crane. There were no injuries.

Findings:

1. The ship's crew did not follow the inspection & maintenance requirements/recommendations of *MHI Technical Information*

2. There was no safe access platform built on the cranes to facilitate inspection/maintenance
3. The Master and Officers were not aware of the existence of the *Technical Information*.
4. There appears to have been no regular checks by the crew of the heel pin retaining bolts as evidenced by the lack of any paint disturbance on the heel pin bearing covers.

Explain the use of Safety Management System to prevention of this incident?

(6 marks)

Question 4

- (a) State the meaning of UNCLOS.

(2 marks)

- (b) **China coast guard vessels escort fishing boat flotilla into Malaysian waters**

KUALA LUMPUR (30/3/2016) – Malaysia's maritime authority said Tuesday Chinese coast guard vessels escorted about 100 Chinese fishing trawlers into Malaysia's territorial waters near Luconia Shoals in the South China Sea last week.

The shoals are known locally as Beting Patinggi Ali.

"It is unprecedented. This is the first time," Malaysia Maritime Enforcement Agency (MMEA) Director-General Adm. Ahmad Puzi Abdul Kahar told reporters of the huge fleet of fishing boats his agency encountered last Thursday. "That is why we are taking a cautious approach."

Puzi showed a map indicating the Chinese boats were within Malaysia's maritime zone and they were discovered conducting their activities (fishing) from Thursday through Sunday with the number of boats ranging from 40 to 100.

The boats were spread out within 1,931-sq.-km (745.5-sq.-mile) area.

He said the fishing boats did not bear any flags or registration numbers but they noticed one Chinese coast guard vessel escorting them while another was anchored near Luconia Shoal. The cluster of shoals and reefs that make up Luconia is located about 84 nautical miles off the coast of Miri town in Sarawak state on the island of Borneo.

Discuss the situation under UNCLOS with respect to the right of coastal state and user state. List the two (2) offences done by the Chinese boats under UNCLOS.

(10 marks)

- (c) Explain the two (2) types/sources of marine pollution. Provide example with your explanation.

(8 marks)

Question 5

- (a) Define the concept of salvage.

(2 marks)

- (b) The Italian cruise ship, Costa Concordia, capsized and sank after striking an underwater rock obstruction off Isola del Giglio, Tuscany, on 13 January 2012, with the loss of 32 lives. The ship, carrying 4,252 people, was on the first leg of a cruise around the Mediterranean Sea, starting from Civitavecchia in Lazio, Italy, when she deviated from her planned route at the Isola del Giglio, coming closer to that island, and struck a rock formation on the sea floor. Based on this incident, create a situation by where it can be considered as pure salvage and non-salvage condition. Explain the situations with respect to the elements of salvage.

(18 marks)

Question 6

- (a) Refer to this Admiralty Court case of *West Coast Resorts vs. Allianz Insurance Co. of Canada*. In the case dispute, the plaintiff was the owner of the barge known as the *Hercules*. The issue in this case was whether the sinking of a barge was due to perils of the sea. The barge had been built in 1933 and had been used to transfer supply since 1995. She had been laid up for the winter in September 1999 and sank in March 2000. At the time of her sinking ordinary wear and tear had opened her seams allowing the continuous ingress of substantial amounts of sea water and requiring continual pumping to keep her afloat. A PVC "diaper" had been previously fitted to control the ingress of water but this was in shreds at the time she was laid up in September of 1999. After the barge was raised it was discovered that the pump which had been keeping her afloat was working properly. The Plaintiff, the assured, alleged that the shore power to the pump must have been interrupted and that the loss was, accordingly, unplanned and due to a peril of the sea. The Defendant, underwriters, alleged that the cause of the sinking was a failure in the planking of the barge due to worm infestation which allowed water to enter at a rate that overwhelmed the pump. The trial Judge agreed with the underwriters and held that the cause of the sinking was chronic leakage and the failure of a plank. As a consequence, the trial Judge held the loss was caused by ordinary wear and tear or the actions of vermin, excluded perils, and not by a peril of the sea. Use the basic four principles of marine insurance for your argument in this case.

(12 marks)

- (b) Shipping is perhaps the most international and dangerous of all the world's great industries. It has always been recognized that the best way of improving safety at sea is by developing international regulations that are followed by all shipping nations. IMO's first task when it came into being in 1959 was to adopt a new version of the International Convention for the Safety of Life at Sea, the most important of all treaties dealing with maritime safety. Explain two of the chapters

in SOLAS. Give an example of equipment that should be installed to comply with its minimum standards for each chapter.

(8 marks)

