ΑΕΝ ΜΑΚΕΔΟΝΙΑΣ
 Ν. ΜΗΧ/ΝΑ

 ΣΧΟΛΗ ΠΛΟΙΑΡΧΩΝ
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# ΕΞΕΤΑΣΤΙΚΗ ΠΕΡΙΟΔΟΣ ΙΟΥΝΙΟΥ 2018 ΜΑΘΗΜΑ ΝΑΥΤΙΚΑ ΑΓΓΛΙΚΑ ΣΤΕΞΑΜΗΝΟΥ

### <u>ΘΕΜΑΤΑ</u>

## EXERCISE 1. ANSWER THE FOLLOWING QUESTIONS IN FULL: (2 points)

- 1. What is the AMVER system? How does it operate?
- 2. Name the classes of dangerous goods, as per IMDG Code, and give examples of substances/articles for each class.

# EXERCISE 2. FILL IN THE MISSING WORDS. THE FIRST LETTER IS GIVEN. (3 points)

- Under ColReg Rule 14, h....(1) situation, when two vessels are meeting on r.....(2) courses and there is risk of collision, they must alter course to starboard and pass port to port.
- The ColRegs require that every vessel shall at all times maintain a proper lookout by s....(3) and hearing as well as by all available means appropriate in the p....(4) circumstances.
- Shipping is reducing its CO2 emissions by using ships that more energy e....(5) through an o....(6) of engine power and use of different fuel types.
- L...(7) means that a solid cargo becomes fluid. This happens when the cargo is c....(8) by the ships motion. These cargoes contain a certain amount of m....(9) that must not be exceeded (TML). Mineral c....(10) and refined ores belong to this category.
- As per IMSBC Code, cargoes with chemical hazards (Group B) present risk of explosion, toxic gas r....(11), and c...
   (12) that can be caused by their residues to cargo space structures. When such cargoes are incompatible, they must be s....(13). Group C cargoes, such as sand and fine particle materials, are easily inhaled and can cause r....
   (14) problems. Iron ore belongs to Group C well, it is a high density cargo that can o....(15) the tanktop and must be evenly distributed during loading and unloading.

# EXERCISE 3. FILL IN THE GAPS. USE THE WORDS GIVEN. THERE ARE EXTRA WORDS. (3 points)

combustion, regulatory, harmonized, contaminated, eliminate, re-ignited, proper, dispersant, violation, disposal, omission, overriding, status, relieving, force, notice, adverse, applicable

- The IMDG Code is a comprehensive ...(1) framework that provides a taxonomy of dangerous goods. Dangerous goods are identified by a four digit number (the UN Number) and the corresponding ...(2) Shipping Name.
- The first aid appropriate in case of exposure to dangerous goods includes carefully removing ...(3) clothing.
- Fire not under control yet. Dangerous goods ...(4). Call the harbor fire brigade. These goods are liable to spontaneous ...(5).
- The changing over of watch is an opportune time to check all aspects of navigation and to ensure that no error or ...(6) is being carried over. The watchkeeping officer may carry on with errors without realizing it, and this is the reason why the ...(7) officer is required to review the navigational ...(8) all over again.
- The vessel's engines are at the ...(9) of the OOW and there should be no hesitation in using them in case of need. Where possible, timely ...(10) of intended variations of engine speed should be given to the duty engineer.
- In order to be able to respond appropriately to a SAR operation, deck officers are required to have knowledge of methods of recovery of survivors in ...(11) weather conditions .
- The mission of Paris MoU is to ...(12) the operation of sub-standard ships through a ...(13) system of port state control. Ships are banned after multiple detentions, yet access to a specific port may be permitted by the relevant authority of that port State in the event of .... (14) majeure or ...(15) safety considerations.

# EXERCISE 4. READING COMPREHENSION. Read the article and do exercises (a) and (b) below.

# The imperfect efforts to curb dumping at sea(Marine Garbage Pollution, by Sarah Cruz Lima, 2012, www.if.org.uk, abridged)

For a very long time it was generally believed that the oceans could absorb anything that was thrown into them. Fortunately this attitude has changed, particularly over the last 30 years or so ....[1]....and scientific research observing the effects of various sources of marine pollution.

#### Not to be underestimated

Marine garbage pollution resulting from the shipping trade is an eminent problem. It is also an obvious problem, but in certain respects highly underestimated. Garbage from ships can be just as deadly to marine life and human health as oil or chemicals. The latter two receive a lot more attention at a regional and international level because they are more apparent and can quickly become political as a consequence.

MARPOL 73/78 is the main international Convention covering prevention of pollution of the marine environment by ships...[2].... It is a combination of two treaties adopted in 1973 and 1978, and updated by amendments through the years. Annex V of the Convention deals with garbage.MARPOL sought to eliminate and reduce the amounts of garbage being dumped into the sea from ships...[3]... to ensure that ships flying their flag do not discharge waste into the sea. It also imposes on the States the duty to provide reception facilities ...[4]...

#### Flaws

Unlike other Annexes of the Convention, the provisions of Annex V address the discharge from ships but do not stipulate the equipment required to do so....[5]...., particularly by those who safely hide behind their status as "developing nations" and claim they do not have the technological power to fulfil their obligation under Annex V. ...[6]....The technical Annexes to the MARPOL Convention 73/78 can be amended by a simple acceptance procedure called "tacit acceptance". This procedure provides that amendments shall enter into force at a particular time...[7]... from a particular number of States.The Convention's implementation system has not eliminated risks, especially due to the increased use of "flags of convenience" and the questionable role of some private and very powerful players in the transport industry. Although the Convention embodies rather sophisticated monitoring mechanisms,...[8]..., their implementation is sometimes inadequate. There are several possible reasons for these inadequacies, including the lack of a legally-binding procedure for failure to comply or even of qualified personnel in the State where the flag is registered.

# **Death by Plastic**

It is estimated that between 60 and 80% of marine debris is made up of plastic, and that plastic is accumulating in the oceans...[9]... Discharging from ships alone has been estimated to contribute around 6.5 million tons of plastic a year. While some plastics can last virtually intact for centuries, recent research has discovered widespread accumulation of microscopic plastic and fibre particles in coastal sediments and pelagic waters, evidently a result of the breakdown of larger items. The environmental consequences of this type of pollutant are not known, but ingestion of such particles by marine species – particularly large mammals such as the humpback whale or the bottlenose dolphin – may result in death.

The MARPOL Convention has been able to mitigate the marine garbage crisis so far. The IMO along with its Member States have set up various technical cooperation committees all over the world in order to better implement Annex V regulations...[10]... The industry continues to grow at a fast pace and persistent pollution will have long-term consequences, the severity of which has not yet been established, but the general concern is the implications of this problem on future generations. The consequences of marine garbage pollution are yet unknown, but it has become clear that continuous unmitigated pollution could cause undesirable changes in biological and economic productivity. This could become more evident, especially in small island states that depend on ocean resources to fulfil their economic social and dietary needs.

# (a) Fill in the missing parts that were extracted from the text. Match the gaps [1,2,3...] to the sentences [A,B,C...] below. (1 point)

- A. from operational or accidental causes
- B. unless before that date objections to these amendments are received by IMO
- C. because of its disposable nature
- D. as a result, the environment suffers
- E. which coincided with the increase in environmental awareness
- F. by imposing general rights and obligations on its Member States
- G. for the prevention of this type of pollution at a regional level
- H. this leaves a dangerous technical gap to be filled by Member States as they see fit
- I. in order to adequately dispose of the garbage produced in the course of a shipping operation
- J. such as certificates and ship inspections

### (b) Answer the following question: (1 point)

Why are the efforts to curb (=control, restrain) dumping at sea imperfect, according to the article? What is your opinion? Is MARPOL Annex V successfully implemented, and can it successfully prevent and control marine garbage pollution?