INDIAN MARITIME UNIVERSITY

(A Central University Government of India)

END SEMESTER EXAMINATIONS-June/July 2019

Diploma in Nautical Science

Semester II

Cargo Handling Stowage and Seamanship II

(UD11T3203)

Date:26-06-2019 **Max. Marks: 70**

Time: 2 hours **Pass Marks: 28**

Note: Non Programmable Scientific Calculator is Permitted.

Part-A

CARGO HANDLING AND STOWAGE

(Question number 1 is compulsory. Attend any 3 questions from this Section)

1. **Fill in the blanks and,** **(1 X 10=10 marks)**

   i. UEL is an acronym for _____.
   ii. An eductor works on _____principle.
   iii. Containers made as per ISO standards must be suitable for transport by _____ modes.
   iv. DOC for carriage of dangerous goods stands for _____.
   v. Coals, Sulphur, Phosphorous are liable to _____combustion.

   Answer "True" or "False"

   vi. As per the IMSBC Code "Group A" cargoes are cargoes which possess a chemical hazard.
   vii. If the tank atmosphere is below the LEL, the tank is outside the "Flammable Range"
   viii. A "Tankscope" can be used to check the atmosphere in a tank even when no Oxygen is present.
   ix. A Vessel need not have a Document of compliance certificate for IMDG cargo, to accept dangerous cargo.
   x. "Hygroscopic cargoes" are cargoes that give off or absorb moisture.

2. (a). Draw and label an eductor. **(5 marks)**
   (b). Write a short note on an "Explosimeter" **(5 marks)**

3. (a). What is a Bay-Row-Tier system on a container ship. **(5 marks)**
   (b). List the contents of a DOC for ships carrying dangerous cargo **(5 marks)**

4. (a) What are the hazards associated with Coal cargoes. **(5 marks)**

(b) As per the IMSBC Code what are the categories of bulk cargoes? Give examples for each category. **(5 marks)**

5. (a) What are the duties of an officer on cargo watch? **(5 marks)**
   (b) What is a type I, type II and type III chemical tanker? **(5 marks)**

Part-B: SEAMANSHIP THEORY/SAFE WORKING PRACTICES

(Answer any 3 other Questions from this section)

6. a) What are the signals for hoisting and lowering when using crane? **(5 marks)**
   b) What are the safety precautions to be observed when rigging the pilot ladder? **(5 marks)**

7. a) With respect to Anchor work what is (i)joining shackle, (ii)Dragging anchor. **(5 marks)**
   b) List the types of "Permits to work" for any five shipboard operations **(5 marks)**

8. a) Explain the method for securing anchor for sea, & covering a Spurling pipe **(5 marks)**
   b) What are the safety precautions to be taken when anchoring? **(5 marks)**

9. a) List any five Safe bunkering practices? **(5 marks)**
   b) What are the items contained in a SOPEP locker? **(5 marks)**

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