

INDIAN MARITIME UNIVERSITY
(A Central University, Govt. of India)
End Semester Examinations- December 2019
DNS (Diploma in Nautical Science)
Semester II

CARGO HANDLING, STOWAGE AND SEAMANSHIP II (UD11T3203)

Date: 11-12-19

Max. Marks: 70

Time: 2 hours

Pass Marks: 35

Q. No. 1 is compulsory and any 3 other Questions from Part A;
Answer any 1 Question from Part B and 2 questions from Part C
All Questions carry equal marks;
Draw sketches wherever required

Part – A: CARGO HANDLING AND STOWAGE

(Answer Q. No. 1 and any 3 other Questions from this Section)

1. Fill in the blanks, (10 x 1 = 10 Marks)

- (i) Decanting of slop tanks takes about _____ hours.
- (ii) _____ Paints are used in cargo oil tanks of an oil tanker.
- (iii) _____ is in charge of carrying out Bunkering Operation.
- (iv) IMSBC stands for _____
- (v) Top most securing arrangement on containers is called _____

State whether True or False:

- (i) "Hazard" is defined as a source of Potential incident.
- (ii) "Explosimeter" is used when tank is Inerted.
- (iii) Bulk carriers are fitted with Hopper tanks and Top side Tanks
- (iv) Permit system by itself will make the job perfectly safe.
- (v) Safety committee should meet at least once every 1 month.

2.

- (a) Explain with a neat sketch the working principle of an educator Along with its application in the cargo system **(5 Marks)**
- (b) List the various hazards associated with the crude Oil cargoes **(5 Marks)**

3.

- (a) With suitable sketch show the Portable securing gears used On Container vessel **(5 Marks)**
- (b) With suitable example explain the markings on the container. **(5 Marks)**

4.

- (a) Explain the preparation of cargo hold for loading Alumina powder after Discharging Coal cargo **(5 Marks)**
- (b) What information needs to be agreed by Ship and Terminal as per Ship-shore safety checklist on Bulk carrier **(5 Marks)**

5.

- (a) Describe how you will keep a cargo watch on General Cargo Ship **(5 Marks)**
- (b) State the requirements of ventilation system and fire precautions on Ro-Ro vessels **(5 Marks)**

Part – B: SEAMANSHIP THEORY

(Answer any 1 Question from this Section)

- 6.** Briefly Explain the below with respect to Anchoring **(5 x 2 = 10 Marks)**
- Short Stay,
 - Snub the cable,
 - A Cockbill,
 - Foul anchor
 - Veer cable

- 7.** **(2 x 5 = 10 Marks)**

- With suitable sketch explain minimum 4 slings used for lifting up of Cargo.
- With suitable sketch explain the standard crane signals (any 5)

Part – C: SAFE WORKING PRACTICE FOR MERCHANT SEAMAN

(Answer any 2 Question from this Section)

- 8.** **(2 x 5 = 10 Marks)**

- Explain the Lock out and Tag out Procedure
- Explain the precautions to be taken while anchoring

- 9.** **(2 x 5 = 10 Marks)**

- Why do we need a Permit- System, for which all work permit-system is Issued
- Describe the Importance of maintaining Health and Hygiene on board the Vessel

- 10.** **With Reference to COSWP explain following (2 x 5 = 10 Marks)**

- Safety precautions to be taken while repairing Radar
- Safety precautions to be taken while using Bosun's Chair