

**Indian Maritime University**  
**(A Central University, Govt of India)**  
**End Semester Examinations – December 2024**  
**Programme Name: Diploma in Nautical Science**  
**Semester: I**  
**Subject Code: UD11T6105**  
**Subject Name: Cargo Work - I**

Date: 17.12.2024

Max Marks: 70

Duration: 03 Hrs

Pass Marks: 35

General Instructions

- i. All Sections (A, B & C) are to be attempted.
- ii. Options, if any, are specified in respective section.

**Section A**

**MCQs– Choose the correct answer as applicable.**

**(1 x 5 = 5 Marks)**

1. Separation between parcels of cargo is carried out for \_\_\_\_\_
  - a) Contaminated cargoes
  - b) Same consignees
  - c) Hazardous cargoes
  - d) All of the above
2. Entries of Cargo loading/unloading equipment's is made in
  - a) Deck logbook
  - b) Engine Logbook
  - c) Chain Register
  - d) Garbage Log
3. Hazards associated with coal cargoes are
  - a) emission of methane
  - b) Emission of Ethane
  - c) Emission of H<sub>2</sub>S
  - d) Emission of Propane
4. Offshore vessels primarily serve the \_\_\_\_\_
  - a) Oil and Gas sector
  - b) Carrying General cargo
  - c) Carry containers
  - d) carrying Cars
5. Software which is used to calculate stability of the ship is called
  - a) Loading app
  - b) Loadicator
  - c) Indicator
  - d) Ballast app

True / False

**(1 x 5 = 5 Marks)**

6. Cargo liable to slide during rolling, such as steel rails, should be stowed Athwart ship. (True or false)
7. Ships GRAIN CAPACITY is used for loading Bulk cargo. (true/false)
8. Action to be taken in case of Accidents Involving Dangerous Goods are mentioned in Cargo Securing Manual (true/false)
9. Deck cargo may be allowed obstruct the view from the navigating bridge or over-side at the bow at Chief Officer's discretion (true/false)
10. Dirty dunnage may contaminate the next cargo (True/False)

## Section B

### Short Answers

(2 x 5 = 10 Marks)

11. Write short note on Ro-Ro Ships.
12. What cargoes, other than in containers are commonly carried on deck?
13. What are the dangers associated with using insecticide in cargo holds?
14. Describe safety approval plate on Container (CSC plate)
15. List the examples of chilled and Frozen cargoes

## Section C Answer all questions

16.

(2x 5marks=10 Marks)

- a) Describe how to Prepare holds after discharge of a general cargo.
- b) describe the classification of dangerous goods in the international maritime dangerous goods (IMDG) code.

17.

If friction accounts for 12% of the load per Sheave, find the minimum size of Nylon rope that can be used in Watch Tackle to disadvantage to lift a weight of 5.5 tons  
(10marks)

18.

(2 x 5marks= 10 Marks)

- a) Define the following as per IMSBC code.
  - 1) angle of repose, 2) flow moisture point,
- b) Define the terms Filled compartments and partly filled compartments as per Grain code

19.

(5 x 2 = 10 Marks)

- a) Explain the uses and purpose of OSVs.
- b) List the equipment's used for lashing containers on deck

20.

(10 Marks)

A Hold 8m x 6m x 4m is to be filled with Steel Pipes (S.F. 1.06 m<sup>3</sup>/t) and Paint Drums (S.F 1.85 m<sup>3</sup>/t). If the load density of the Tank top is 3.20 t/m<sup>2</sup>, up to what height should the Steel be loaded so that the hold is filled without exceeding the load density? How many tonnes of Steel pipes and Paint drums can be loaded?

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