
Indian Maritime University
(A Central University, Govt of India)
End Semester Examinations – June 2026
Programme Name: DNS
Semester: I
Subject Code: UD11T6105
Subject Name: Cargo Work – I

Date: 05.06.2026

Max Marks: 70

Duration: 03 Hrs

Pass Marks: 35

General Instructions

- (i) All Sections (A, B & C) are to be attempted.
- (ii) Non-programmable scientific calculator may be allowed

Section A

Ten MCQs/Fill in the Blanks of 01 Mark each – Choose the correct answer as applicable.

1. The Chain Register is used for recording:

- a. Cargo manifest b. Deck log c. Details and tests of lifting gear
d. Engine maintenance

2. A deodorizing wash or treatment using an ozonator may be necessary to remove strong _____ from a previous cargo in Cargo hold.

3. Horizontal movement of Crane Jib is known as _____
a. Turning b. Hoisting c. Jibbing d. Slewing

4. The sudden change in some solid bulk cargoes where, due to moisture and movement, they begin to behave like a liquid during transit is called as _____

5. Oxidizing substances and Organic peroxides are covered under DG Class _____

a. Class 4 b. Class 5 c. Class 6 d. Class 7

6. _____ is the process of levelling and distributing bulk cargo evenly within a cargo hold during Grain loading.

7. The Safe Working Load (SWL) of lifting gear is determined by dividing the breaking load by which of the following?

a. Breaking strength b. Proof load c. Factor of Safety d. maximum load

8. From the conning position, the forward view of the sea surface must remain clear and unobstructed for a distance not exceeding:

a. The length of the ship or up to 300 meters
b. No more than two ship lengths or 500 meters, whichever is less
c. At least 600 meters regardless of ship length
d. A fixed distance of 150 meters, irrespective of ship size

9. _____ are specialized devices installed in Compartment drains of Refrigerated spaces on Reefer vessels.

10. The protective perforated structure at bilge suction pipe inlet in the cargo hold is known as a _____.

Section B

Five Questions of 02 Marks each

11. Explain the importance of trimming of cargo.

12. State the entries made in Chain Register.

13. Write a brief note on load lines.

14. Describe Dry and High cube containers

15. What are the reasons of using dunnage?

Section C

Five Questions of 10 Marks each. All are compulsory.

16. A hold 8m x 6m x 4m is to be filled with steel pipes (SF 1.06 m³/T) and paint drums (SF 1.85 m³/T). If the Load Density of tank top is 3.20 T/m², 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?

17. What are the inspections and checks to be done before loading dangerous goods?

18. List the classification of Dangerous goods in the International Maritime Dangerous Goods (IMDG) Code.

19. A Gyn tackle rigged to advantage is used to lift a load of 6 tonnes.

i. Find the effort on hauling part and the minimum size of polypropylene rope required . (Assume friction per sheave as 12%) (7 marks)

ii. Also find out the efficiency of the system . (3 marks)

20. Describe the hazards associated with coal.
