

INDIAN MARITIME UNIVERSITY
(A Central University, Government of India)

June 2017 End Semester Examinations
Diploma in Nautical Science – First Semester

Cargo Handling, Stowage and Seamanship - I – UD11T 1106)

(Aug' 2009 to Feb' 2012 batches only)

Date: 21.06.2017

Time: 2 Hrs

Maximum Marks : 70

Pass Marks : 28

SECTION – I

*Answer any FOUR questions. Questions no.1 is compulsory. All questions carry
10 marks each.*

1. A Tween Deck is 18mX15mX4m and has a permissible load density of 5 t/m², Steel billets of SF 0.35 m³/t and general cargo of SF 4.0 m³/t are to be loaded therein to fill all the available space. Find the maximum quantity of steel billets that can be loaded and the quantity of over stowed general cargo so that the load density is not exceeded. (10 marks)
2. List out various types of Merchant Ships. Give examples of the Cargoes they carry. (10 marks)
3. Define
 - (a) Stowage factor
 - (b) Broken stowage
 - (c) Load Density
 - (d) Cargo Density(10 marks)
4. Describe different type of "Sweat" and precaution and control . (10 marks)
5. Write notes on
 - (a) Types of Ropes and Wires
 - (b) Cargo securing manual.(10 marks)

SECTION-II

*Answer any THREE questions only. Questions no.6 is compulsory. All questions
carry 10 marks each.*

6. A box shaped Vessel 20X6X4.5 floats in DW of RD 1.010 at a draft of 2.4m. Calculate the percentage reserve buoyancy in DW of RD 1.020. (10 marks)
7. (a) Draw the loadline and plimsol marks with their dimensions. (5 marks)
b) What is the importance of the loadline Marks? (5 marks)

8. Write Notes on Precaution while working aloft/over side. (10 marks)

9. Sketch and name the principal parts of Ship (10 marks)

(a) Peak Tanks (b) Double bottom tanks.

(c) Cargo Tanks(Spaces) (d) Ballast Tanks.
