

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 3106)
(August 2015 batch onwards)

Date: 21.06.2017

Maximum Marks : 70

Time: d2 Hrs

Pass Marks : 35

SECTION – I

Note: Question no.1 is compulsory and Answer any **three** from the remaining questions.

All questions carry equal marks.

(4 x 10 = 40marks)

1. (a) Define: (i) Stowage factor (ii) Broken Stowage (5 marks)
(b) A cargo hold measures 20m×18m×10m. How many tones of cotton having S.F.2.6m /t and broken stowage 8% would fit in it. (5 marks)
2. Explain briefly the following terms. (10 marks)
(a) Deadweight Cargo (b). Plimsoll mark (c). Bale Capacity (d). Grain Capacity (e). Solid bulk Cargo
3. (a). How will you go about preparing a cargo hold for loading grain which earlier had carried iron ore cargo? Describe briefly. (6 marks)
(b). Write down the authority and duties of Dock Labour Inspector?(4 marks)
4. Write short notes on:
(a). Cargo Securing Manual. (5 marks)
(b). Weather tightness test for hatch covers. (5 marks)
5. (a). Explain ship's sweat and cargo sweat. (4 marks)
(b). Describe how the cargo ventilation is carried out onboard ship to prevent sweat formation. (6 marks)

SECTION – B
ANSWER ANY 2 QUESTIONS

(2 x 10 =20marks)

6. (a). Explain the care and maintenance of wire ropes. (5 marks)
- (b). Write in detail the different types of ropes used onboard ship with regard to constructions and stowage. (5 marks)
7. (a). Explain use of i). Gun Tackle ii). Three fold purchase iii). Hand lead line. (6 marks)
- (b). A box-shaped vessel of dimension 24m×5m×3m has a Mean draft of 1.2m in Dock water of RD 1.009. Calculate her draft. Dock water of RD 1.019 (4 marks)
8. (a). Write the different component of types of paints? (4 marks)
- (b). Explain cathodic protection systems for corrosion control on board ship. (6 marks)

SECTION – C
ANSWER ANY 1 QUESTION

(1 x 10 = 10 marks)

9. Write short notes:
- (a). Safety committee meeting.
- (b). Role & responsibility of safety officer.
10. (a). What is "Permit to Work" as per Code of Safe working Practices? Explain?
- (b). Write down Precautions to be taken while entering into enclosed space.
