

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 2106)

(Aug' 2012 to Feb' 2015 batches onwards)

Date: 21.06.2017

Time: 2 Hrs

Maximum Marks : 70

Pass Marks : 28

SECTION A

Answer any three questions

- Q1) Explain the following: (10 Marks)
- a) Bale capacity b) Brain capacity c) Broken stowage d) Load density
e) ullage
- Q2) a). Define the term, "ship sweat" and "cargo sweat". (5 Marks)
b). Explain method of ventilation to control process of different types of sweat, onboard ship. (5 Marks)
- Q3) Describe the procedure to prepare a Cargo hold prior loading Cargo of Coal. (10 Marks)
- Q4) Explain methods to test weather tightness of hatch covers onboard ship (10 Marks)

SECTION B

Answer any one question

- Q5) a). What are the different types of synthetic ropes being used on ship. (5 Marks)
b). Explain Methods of maintaining wire ropes onboard ship (5 Marks)
- Q6) Draw a neat and labeled sketch of stockless anchor (10 Marks)

SECTION C

QUESTION 7 IS COMPULSORY. ATTEMPT TWO MORE FROM THE REST.

- Q7) A tank of 2400m^3 volume and 12m depth has vertical sides and horizontal bottom.
Calculate how many tonnes of oil of RD 0.7 it can hold, allowing 2% of the volume of the tank for expansion. Also state the ullage after completion of loading. (10 Marks)
- Q8) a). What do you understand by fresh water allowance (FWA) (2 Marks)
- b). A box shaped Vessel having FWA 175 mm, goes from water of RD 1006 to water of RD 1018. Find out the amount of change in her draft. (8 Marks)
- Q9) a). Draw the loadline mark for ship of length 120m. (10 Marks)
- b). What is importance of these marks? (10 Marks)
- Q10). Explain the following with a sketch. (10 Marks)
- a). Length between Perpendicular b) forward perpendicular
- c) Aft perpendicular d) Length Over All e) Extreme breadth
