

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

May/ June 2017 End Semester Examinations  
**Diploma in Nautical Science- Second Semester**  
(AY 2009- February 2012 batches only)

**Cargo Handling, Stowage and Seamanship - II (UD11T1203)**

Date : 17.06.2017

Maximum Marks: 70

Time: 2 Hrs

Pass Marks : 28

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Note: Answer Q. No. 1 and any 3 other Questions from Section A.

Answer any 1 Question from Section B.

Answer any 2 Questions from Section C.

All Questions carry equal marks

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**Section- A**  
**Cargo Handling and Stowage**

1. Write short notes on: ( 2 x 5 marks = 10 marks)
  - a. Direct line piping system on Tankers
  - b. Centrifugal pumps
  
2. Write short notes on: (2x 5 marks =10 marks)
  - a. Open top and open side container
  - b. Container Number
  
3. a. What are Hygroscopic cargoes  
b. With reference to IMDG code,What is MFAG?  
(2 x 5 marks =10 marks)
  
- 4.a. Describe the tests that can be done to test hatches for W/Tightness?  
b. What is a 'Chain Register' and what records are maintained in it?  
(2 x 5 marks =10 marks)
  
5. a. What is 'Ship sweat', when does it occur and how do you prevent it.  
b. What Ro-Ro and Lo-Lo ships. (2 x 5 marks=10 marks)

**Section- B**  
**Seamanship Theory**

6. a. Briefly explain the below with respect to Anchoring.  
(5 x 2 marks = 10 marks)
- a. Yawing
  - b. Marking of cable
  - c. Windlass
  - d. Indications of anchor dragging
  - e. Anchor for sea
7. a. Name and Describe the different types of slings.  
b. What are the signals used in Crane operations.  
(2 x 5 marks= 10 marks)

**Section- C**  
**Safe working practices for Merchant Seaman**

8. a. Describe the role of Ship Security Officer  
b. What is the role of the Safety Officer onboard ship  
(2 x 5 marks = 10 marks)
9. Describe the safety precautions needed while
- a. Rigging a Gangway
  - b. Using a Bosun's chair  
(2 x 5 marks = 10 marks)
- 10 Describe the safety precautions to take before
- a. Bunkering operations
  - b. Working over side.  
(2 x 5 marks = 10 marks)

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