

Indian Maritime University
(A Central University, Govt of India)
End Semester Examinations – June 2023
Programme Name: B Sc (NS)
Semester: V
Subject Code: UG21T4504

Subject Name: Specialized Cargo Handling & Stowage

Date: 12.06.2023	Max Marks: 70
Duration: 03 Hrs	Pass Marks: 35

General Instructions

- (i) All Sections (A, B & C) are to be attempted.
- (ii) Options, if any, are specified in respective section.

Section A

Ten MCQs 01 Mark each – Choose the most correct answer.

1. Stowage of containers is based on :
 - A) Bay, Row & Tier.
 - B) Column, Tier & Row
 - C) Ullage , Sounding & Tier
 - D) None of the above.
2. Reefer cargoes are classified into ___ categories.
 - A)4
 - B)3
 - C)2
 - D)None of the above
3. Guidelines for the prevention of pollution by Oil is stated in which of the below mentioned Annexes of MARPOL.
 - A)Annex II
 - B)Annex III
 - C)Annex I
 - D)Annex V
4. Personal gas meters onboard normally state the concentration/presence of below gases. Select the best option.
 - A)HC,O₂,CO₂,CO
 - B)HC,O₂,H₂S,CO
 - C)HC,CO₂,H₂S,SO₂
 - D)None of the above.

5. Tank scope works in any condition of the tank that is Inerted and Gas Free.
A)True B)False
6. The most important aspect during loading of Heavy lift with the ship's own lifting gear is _____. Select the best option.
A)Location and change in position of G (Centre of Gravity)
B)SWL of Lifting Gear
C)Ballast distribution.
D)All of the above.
- 7.The various types of chemical tankers are :-
A)Type A, Type B, Type C
B)X,Y,Z & OS
C)Type 1, Type 2, Type 3
D)None of the above.
- 8.The types of cargo carried by a Chemical tanker as per Annex II are :-
A)Type A, Type B, Type C
B)X,Y,Z & OS
C)Type 1, Type 2, Type 3
D)None of the above.
9. What does MARVS stand for ?
A)Maximum Allowable Reserve Vacuum Setting
B)Minimum Allowable Reserve Volume Setting
C)Maximum Allowable Relief Valve Setting
D)None of the Above.
- 10.How many types of LNG ships are there.
A)3
B)2
C)4
D)None of the Above.

Section B

Five Questions of 02 Marks each. SHORT ANSWER TYPE QUESTIONS

11. What information is contained in the "International certificate of fitness for the carriage of liquid gases in bulk "
- 12.State the types of RO-RO ships.(At least 5)
- 13.List the types of Offshore vessel. (At least 4)
- 14.Enumerate 3 types of Reefer cargoes.
- 15.Define Spike Crude Oil.

Section C

Answer five out of seven questions. (10
Marks Each)

16. a) Define purging and its purpose. (4 Marks)

b)What are the different ways of doing purging. Describe with the help of diagram. (6 Marks)

17. a) What is the purpose of CSC Plate on a container. (4 Marks)
b) Write down the contents of CSC Plate. (6 Marks)
18. Describe different types of noxious liquid substances in bulk. (10 marks)
19. Explain the Purpose. Requirements, advantages and Precautions of COW. (10 Marks)
20. Give short descriptions of any 5 type of offshore vessel. (10 marks)
- 21.a) Write Short note on Fully pressurized, Semi pressurized and Fully refrigerated LNG / LPG ships (6 marks)
b) list the types of tanks used on the gas carrier. (4 marks)
22. a) Sketch and describe Flammability Diagram (6 Marks)
b) List 4 gases detected by Multigas detector (4 Marks)

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