

INDIAN MARITIME UNIVERSITY
(A Central University Government of India)
B Sc (Nautical Science)
June July 2019 End Semester Examination
Semester IV
Cargo Handling and Stowage - II
UG21T3403

Date : 28.06.2019
Duration : 3 Hrs

Max Marks : 70 Marks
Pass Mark : 35 Mark

Note: Question No. 1 is compulsory.
Solve any 6 questions from remaining 8 questions (each of 10 marks).
Scientific Calculator is permitted.

- Q.1 Short Notes from All Units from 1 to 10 (2 x 5 =10 marks)
- (a) Cargo Sloshing
 - (b) Maximum Permissible Load
 - (c) Charterer, Owner and Ship Broker
 - (d) Timber Load Line
 - (e) Voyage Charter party
- Q2. Enumerate the inspections to be carried out prior loading cargo in a hold of a bulk carrier. Also list the preparations and important documentation to be done with the suppliers before loading. (10 marks)
- Q3. (a) Write short notes on Dangerous cargoes stowage below deck (5 marks)
- (b) Enumerate the precautions to be taken for stowage of Timber cargo on Deck (5 marks)
- Q4. Write short notes on the following (2 x 5=10 marks)
- (a) Items to be examined in Annual Thorough Examination of Ships Lifting Appliances
 - (b) Contents of Chain Register
- Q5. (2 x 5=10 marks)
- (a) Enumerate the Hazards while loading and transporting High Density Cargo
 - (b) Explain the requirement to Trim Bulk cargoes and the consequent effects.

Q.6. (2 x 5=10 marks)

Write short note on

- (a). Grain shifting and precautions to reduce the same
- (b) Document of authorization for grain loading

Q.7. (a) What is "Note of Protest". Explain. (5 marks)

(b) Enumerate the classes of dangerous Goods in IMDG code and List the subclasses under explosives. (5 marks)

- Q.8. A ship of 6000 tonnes displacement has drafts 7m Fwd and 8 m aft. MCT 1 cm -100 tonnes-m,TPC 20 tonnes , centre of floatation is amidships. 500 tonnes of cargo is discharged from each of the following four holds
- No 1 Hold , COG, 40 m forward of amidships
- No 2 Hold , COG, 25 m forward of amidships
- No 3 Hold , COG, 20 m aft of amidships
- No 4 Hold , COG, 50 m aft of amidships.
- The following Bunkers are loaded
- 150 tonnes at 12m forward of midships
- 50 tonnes at 15 m aft of midships. Find the new Drafts forward and Aft. (10 marks)

Q.9. (a) Explain the duties of Dock Safety Inspector (5 marks)

(b) Importance of Cargo Liquefaction (5 marks)