

# CBCS SCHEME

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17MR744

## Seventh Semester B.E. Degree Examination, Jan./Feb. 2021 Advanced Marine Technology

Time: 3 hrs.

Max. Marks: 100

**Note:** Answer any FIVE full questions, choosing ONE full question from each module.

### Module-1

- 1 a. Explain briefly the origin of double hull ships. (05 Marks)  
b. Explain IG system, with a neat sketch. (15 Marks)

OR

- 2 a. Briefly explain the phasing out of single hull tankers. (07 Marks)  
b. With a neat sketch, explain deep well cargo pump. (13 Marks)

### Module-2

- 3 a. Briefly explain about basic cargo tank types used on board gas carriers. (15 Marks)  
b. Write a note on Fully Pressurised Ships. (05 Marks)

OR

- 4 a. What are the functions of Reliquification plant? Explain the two types of Reliquification plants. (15 Marks)  
b. Explain how nitrogen can be generated. (05 Marks)

### Module-3

- 5 a. Explain "Load on Top" (LOT). (07 Marks)  
b. Explain the types of ballast tanks as per usage on oil tankers. (05 Marks)  
c. Explain about ballast tank protection. (08 Marks)

OR

- 6 a. What are the ways to make cargo operation on oil tankers safer? Explain any 10 points. (10 Marks)  
b. Briefly explain about Emergency shutdown system in Gas Carriers. (10 Marks)

### Module-4

- 7 a. What is IMDG code? What are the key objectives of the code? When and why IMDG code was adopted? (08 Marks)  
b. Explain in detail about nine classification of dangerous goods. (12 Marks)

OR

- 8 a. Write about various Precaution Procedures to be done before the cargo operations in port. (15 Marks)  
b. Explain about tank cleaning method on board modern chemical tankers. (05 Marks)

### Module-5

- 9 a. Explain the following types of bulk carriers : (15 Marks)  
i) Basic or Conventional ii) Combined iii) Gearless.  
b. Write a note on "Bulk - In, Bags Out". (05 Marks)

OR

- 10 a. Explain about the types of container ships. (15 Marks)  
b. What are the advantages of Ro - Ro ships? (05 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.