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

USN 10MR71

Seventh Semester B.E. Degree Examination, June/July 2019 Advanced Marine Technology

Time: 3 hrs. Max. Marks: 100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART - A

- 1 a. Explain the various bridge equipments and its importance for the safe navigation of the ship.

 (12 Marks)
 - b. What are the checks to be done before UMS is made? (08 Marks)
- 2 a. Explain with neat sketch, the working principle of cascade type reliquification of cargo in LNG ship. (12 Marks)
 - b. What are the factors to be considered before loading the LNG in the vessel? (08 Marks)
- 3 a. Briefly explain with sketch, fully pressurized and fully refrigerated ships. (12 Marks)
 - b. Write a note on Emergency shutdown system. (08 Marks)
- 4 Name and explain the purpose of different types of cargo piping system in chemical tankers and draw the schematic line diagram of group main system. (20 Marks)

PART - B

- 5 a. Draw and explain IG system on oil tankers and also write the installed alarm and trips.
 (14 Marks)
 - b. What are the checks to be done before crude oil washing? (06 Marks)
- 6 a. Explain the importance of ventilation on a car carrier. (08 Marks)
 - b. Explain the midship section of a car carrier, with a neat sketch. (12 Marks)
- 7 a. Write the aim, scope and guidelines for condition assessment program including inspection items and end reports. (12 Marks)
 - b. Explain hatch cover construction and related parts in detail. (08 Marks)
- 8 a. What are the methods used on board to reduce SO_X and NO_X emission? (10 Marks)
 - b. Briefly explain the features of IAPP certificate. (10 Marks)
