

CBCS SCHEME

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18MR35

Third Semester B.E. Degree Examination, Feb./Mar. 2022 Elementary Navigation, Seamanship and Survival at Sea

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Briefly explain the organizational structure of the engine and deck department on board a merchant ship with their duties and their ranks. (17 Marks)
b. Imagine a crew member has been put on deck and suffers from a heat stroke. What is the first aid you will provide? (03 Marks)

OR

- 2 a. You have been given the job of testing and approving a life buoy as your first job. List the criteria for approving a life buoy under SOLAS. (10 Marks)
b. You have been asked to communicate the name of your ship 'GANGES' to the Neighboring ship. List the phonetic alphabets you would use. (04 Marks)
c. Write a short note on oil tankers. (06 Marks)

Module-2

- 3 Explain in detail the procedure for lowering and boarding a Davit type life boat. (20 Marks)

OR

- 4 a. Draw and explain the structure for No1, No2 and No3 wire ropes. (15 Marks)
b. Briefly explain the mooring gear and Name its parts. (05 Marks)

Module-3

- 5 a. What is the typical information you would get from a Weather report given to a ship. (06 Marks)
b. Explain the heavy weather precautions to be taken for a tanker vessel in open water conditions. (14 Marks)

OR

- 6 a. Explain the Beaufort wind scale and the need for it. (15 Marks)
b. Explain why Tsunami is a very dangerous and undesirable condition at sea and port. (05 Marks)

Module-4

- 7 a. Imagine your ship has grounded and is sinking. You have been forced to jump to the sea. Explain the procedure to launch and get on the life rafts. (15 Marks)
b. Name and explain the different types of life rafts. (05 Marks)

OR

- 8 a. Explain the SOLAS requirements for the items to be present on a life boat. (15 Marks)
b. Explain Hypothermia. (05 Marks)

Module-5

- 9 a. You are working on a chemical carrier. Explain the discharge criteria and the Marpol Annex associated with the ship. (15 Marks)
b. What were the major objectives of ISPS? (05 Marks)

OR

- 10 What is the SOLAS convention? Explain each chapter briefly. (20 Marks)

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.