

CBCS SCHEME

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18MR35

Third Semester B.E. Degree Examination, Aug./Sept.2020 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 describe the designation, jobs and duties of the various personnel of the engine department in a merchant vessel. (12 Marks)
- b. Imagine you are communicating to a neighbouring vessel on VHF. How would you spell your ships name, 'AMAZON', using phonetic alphabets? (03 Marks)
- c. Define the following nautical terms :
(i) Galley (ii) Hull (iii) Port (iv) Stern (v) Scuppers (05 Marks)

OR

- 2 a. Classify the list of life saving appliances and equipment under general personnel and distress signaling equipment. (12 Marks)
- b. You are the manager of a life jacket manufacturing factory. What would be the criteria to be met as per SOLAS for an adult Life Jacket for a merchant ship? (08 Marks)

Module-2

- 3 a. Draw and explain the various parts of an conventional anchor. (10 Marks)
- b. What is a Mooring Winch? Name and explain the use of its various parts. (10 Marks)

OR

- 4 a. What are the different types of common cables available on board ships? Explain their properties. (16 Marks)
- b. Draw a simple diagram of a moored ship detailing the different mooring lines. (04 Marks)

Module-3

- 5 a. Explain the six different methods of navigation. (10 Marks)
- b. Differentiate between Cumulus, Stratocumulus and Cumulonimbus clouds. (05 Marks)
- c. Explain the following terms: Knot, fathom and log, with respect to a ship. (05 Marks)

OR

- 6 What are the factors that must be taken into consideration to make an anchor plan?(20 Marks)

Module-4

- 7 a. Imagine that you have joined an oil tanker as a junior engineer. The ship has ground and captain asks you and another crew member to launch the starboard side life raft. Explain the procedure of launching and getting everybody on board. (12 Marks)
- b. List the different types of life boats. Which one do you think will be present on an oil tanker and why? (08 Marks)

OR

- 8 a. Explain the working of an HRU. (06 Marks)
b. The 3rd officer has called you to the lifeboat deck and asked you to assist him in taking the inventory of the lifeboat equipment. What would your list look like? (14 Marks)

Module-5

- 9 a. What is the STCW convention? Briefly explain its significance and its 8 chapters. (12 Marks)
b. What is the IMO convention for marine pollution? What are its annexes? (08 Marks)

OR

- 10 a. Explain the major changes in the STCW Code after the manila amendment. (13 Marks)
b. What are the major objectives of the ISPS code? (07 Marks)
