

CBCS Scheme

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15MR35

Third Semester B.E. Degree Examination, Dec.2016/Jan.2017

Elementary Navigation and Seamanship and Survival at Sea

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. Explain general lighting arrangements in ships showing its position, colour and arc of visibility. Also explain different day and night signals displayed for different operation on ship. (12 Marks)
b. Briefly explain the duties of lookout man. (04 Marks)

OR

- 2 a. What are the basic precaution to be taken on/during rough weather? (10 Marks)
b. Define the following ship terms : i) Bulbous bow ii) Cofferdam iii) Draught/draft. (06 Marks)

Module-2

- 3 a. Define mooring. With a neat sketch, explain the purpose of each mooring line. (10 Marks)
b. Explain cable stopper. (06 Marks)

OR

- 4 a. Briefly explain the following with neat sketch : i) Reef knot ii) heaving line. (08 Marks)
b. Write a note on general care and maintenance of ropes. (08 Marks)

Module-3

- 5 a. State the use and working principle of Sextant with a line diagram. (12 Marks)
b. Write a brief note on navigation compass. (04 Marks)

OR

- 6 a. State the use and explain the working principle of echo-sounder and its components. (08 Marks)
b. Write in-detail on satellite navigation. (08 Marks)

Module-4

- 7 a. What is HRU? Explain its working with neat sketch. (08 Marks)
b. Write the general requirements of thermal protective aid and immersion suit. (08 Marks)

OR

- 8 a. What is muster list? Explain its features. (08 Marks)
b. List and explain the uses of atleast 10 equipments carried in life raft. (08 Marks)

Module-5

- 9 Write a note on MARPOL 73/78 which should include objective, 6 annexes and its explanation and also regulatory control towards environmental pollution at sea. (16 Marks)

OR

- 10 a. Explain in detail the objectives of SOLAS and its chapters. (10 Marks)
b. Explain briefly the main objectives of ISPS code. (06 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.