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10MR44

Fourth Semester B.E. Degree Examination, Dec.2016/Jan.2017
Ship Structure and Construction

Time: 3 hrs.

Max. Marks:100

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

PART – A

- 1 a. Define following terms with help of neat sketch :
i) free board ii) rise of floor iii) tumble home iv) L.O.A (10 Marks)
b. Describe longitudinal bending of a vessel. (10 Marks)
- 2 a. Explain with neat sketch metallic arc welding and argon arc welding. (10 Marks)
b. Explain types or testing of welds. (10 Marks)
- 3 a. Sketch and explain double bottom of an oil tanker. (10 Marks)
b. Sketch and describe about shell and deck plating and with example. (10 Marks)
- 4 a. What are bulkheads? Explain function of bulkheads. (05 Marks)
b. Explain about deep tanks. (05 Marks)
c. Explain with neat sketch the basic working principle of horizontal sliding water tight door. (10 Marks)

PART – B

- 5 a. What are the regulations for collision bulkheads? (04 Marks)
b. Explain the arrangements to resist panting. (06 Marks)
c. Explain briefly about types of rudder. (10 Marks)
- 6 a. Sketch the plimsoll load line marking carved on a ship indicating its dimensions. (10 Marks)
b. Explain life saving appliances on board. (10 Marks)
- 7 a. Briefly explain different type of tank system been introduced in liquefied gas carriers. (10 Marks)
b. Explain the essential constructional differences between the following types of vessels.
i) Oil tanker in bulk carrier
ii) Container ship. (10 Marks)
- 8 a. Describing the functioning of ship classification societies. (10 Marks)
b. List the certificates to be carried on board ships. (05 Marks)
c. Describe ship registration formalities. (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. 4+4=8 – 30, will be treated as malpractice.