

CBCS Scheme

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15MR44

Fourth Semester B.E. Degree Examination, June/July 2017 Ship Structure and Construction

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. Define the following terms with help of neat sketch:
i) Free board ii) Rise of floor iii) Tumble home iv) LOA (08 Marks)
- b. Explain the following stresses acting on a ship:
i) Hogging ii) Sagging iii) Pounding iv) Racking (08 Marks)

OR

- 2 a. Explain the process of metallic arc welding with a neat sketch. (08 Marks)
- b. With a neat sketch, explain the different types of welding faults. (08 Marks)

Module-2

- 3 a. With a neat sketch, explain the stem construction of a ship. (08 Marks)
- b. Sketch and label: i) Longitudinally framed solid floor (08 Marks)
ii) Transversely framed bracket floor.

OR

- 4 a. What is a collision bulkhead? Under what convention the construction of it is explained. Give the regulation for construction of collision bulkhead. (08 Marks)
- b. With the neat sketch, explain the types of Rudder. (08 Marks)

Module-3

- 5 a. Write short notes on: i) Shell plating, ii) Deck plating. (08 Marks)
- b. Sketch and explain the mid-ship section of a welded ship. (08 Marks)

OR

- 6 a. Sketch and explain the vertical type sliding water tight door. (08 Marks)
- b. Sketch the arrangement for passing cables and pipes through a water tight bulkhead. (08 Marks)

Module-4

- 7 a. Explain the different types of hatch covers used on ships, with example. (08 Marks)
- b. Sketch the load line marking on a ship indicating its dimensions. (08 Marks)

OR

- 8 a. Sketch a layout of shipyard. (08 Marks)
- b. Explain the role of surveyors in construction of a ship. (08 Marks)

Module-5

- 9 a. Write short notes on: i) Corrosion control, ii) Antifouling system. (08 Marks)
- b. Explain the process of surface preparation and painting on ship. (08 Marks)

OR

- 10 a. Explain the essential constructional differences between the following type of vessels:
i) Container ship ii) Dry bulk carrier (08 Marks)
- b. Briefly explain different type of tank system on a liquefied gas carrier. (08 Marks)

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