

# CBCS Scheme

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15MR44

## Fourth Semester B.E. Degree Examination, June/July 2018 Ship Structure and Construction

Time: 3 hrs.

Max. Marks: 80

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

### Module-1

- 1 a. Briefly explain longitudinal and transverse bending stresses to which a ship is subjected with a neat diagram. (10 Marks)  
b. Differentiate between Surging and Swaying. (03 Marks)  
c. Differentiate Pounding and Panting. (03 Marks)

OR

- 2 a. With a neat figure explain gas welding. (10 Marks)  
b. Brief out the steps used for testing of welds. (06 Marks)

### Module-2

- 3 a. Explain with neat sketch double bottom in the machinery space and side framing. (10 Marks)  
b. Explain sternframe construction of a ship. (06 Marks)

OR

- 4 a. With the neat sketch, explain the types of rudder. (08 Marks)  
b. Write a note on water light bulkhead and corrugated bulkhead. (08 Marks)

### Module-3

- 5 a. Explain with neat diagram Deck plating and Deck girders. (08 Marks)  
b. With a neat diagram briefly write a note on collision bulkheads. (08 Marks)

OR

- 6 a. Explain with diagram two types of water tight doors. (08 Marks)  
b. Write a note on deep tanks for water ballast or dry cargo only and for oil fuel or oil cargo. (08 Marks)

### Module-4

- 7 a. Explain with representation of load line marks on ship. What is the purpose and why it is necessary to have load lines. (10 Marks)  
b. Explain different types of hatchways with diagram. (06 Marks)

OR

- 8 a. Show the sketch of ship yard with layout. (08 Marks)  
b. Explain fire protection system in the ship. (08 Marks)

### Module-5

- 9 a. Explain insulation system in ship. Mention the types with neat diagram. (12 Marks)  
b. Define corrosion and briefly explain the process to prevent corrosion. (04 Marks)

OR

- 10 a. Write a note on rolling and stabilization when a ship is heeled by an external force. (08 Marks)  
b. Explain with neat diagram a general dry cargo ship. (08 Marks)

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