## 18MR44

## Fourth Semester B.E. Degree Examination, Dec.2023/Jan.2024 Ship Structures and Construction

Time: 3 hrs.

Max. Marks: 100

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

Module-1

Explain the following terms and abbreviations: 1

i) L.O.A ii) L.B.P.

iii) B. Ext.

iv) D.Mld

vi) round of beam

vii) shear

viii) Rise of floor ix) light weight

x) Tumble home.

(20 Marks)

Explain the following stresses in ship's structure in detail: 2

i) Hogging

ii) Sagging

iii) Pounding

iv) Panting v) Racking.

(20 Marks)

Module-2

Explain the following constructions of Bottom and side framing: 3

i) Double bottoms

ii) Watertight floors iii) Duct keel

iv) Tank side bracket.

(20 Marks)

OR

Explain the following constructions of Atter end arrangements: 4

i) Cruiser stern ii) Transom stern iii) Spade Rudder and open water stern.

(20 Marks)

Module-3

Explain the following construction of shell and Deck's: 5

i) Bulwark

ii) Deck Girders iii) Deep tank Hatch

iv) Hatch wedges.

(20 Marks)

Explain the following constructions of Bulkheads and Deep tanks in detail: 6

i) Welded water tight bulkhead ii) Vertical sliding water tight door.

(20 Marks)

Module-4

Explain in detail about freeboard markings and tonnage mark with the help of a neat sketch. 7

(20 Marks)

Explain the role of Surveyors in construction of ship.

(10 Marks)

Draw/sketch a layout of shipyard, fabrication assembly, subassembly and units of (10 Marks) construction.

Module-5

With the help of a neat sketch, explain Ore carrier in detail. 9

(20 Marks)

Draw a midship section of a liquefied gas carrier. 10

(10 Marks)

Draw a midship section of a chemical carrier. b.

(10 Marks)

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.