

Indian Maritime University
(A Central University, Govt of India)

Supplementary Examinations – September/October 2024

Programme Name: B Sc (NS)

Semester: VI

Subject Code: UG21T5602

Subject Name: NAVAL ARCHITECTURE PAPER II

Date: 14.10.2024

Max Marks: 70

Duration: 03 Hrs

Pass Marks: 35

General Instructions

- (i) All Sections (A, B & C) are to be attempted,
- (ii) Options, if any, are specified in respective section.

Section A

Ten MCQs/Fill in the Blanks of 01 Mark each – Choose the correct answer as applicable.

1. The time elapsed from the moment the stern takes the blocks until the ship overall taking the blocks is known as _____
2. When the midship draft is more as compared to the Fore and aft draft, the ship is said to be _____
3. Deck edge immerses at a _____ angle of heel at higher freeboard.
4. The performance of Loadicator is verified using pre calculated conditions provided by the shipyard which are called as _____
5. _____ and _____ are amongst few of the outputs generated by the loadicator.
6. _____ Line is drawn at least 76 mm below the bulkhead deck which should not be submerged in any condition of flooding.
7. In corrosion control systems used on board ships, ICCP means _____
8. The survey carried out at the end of the term of a certificate is called _____ survey
9. IACS stands for _____
10. All the surveys of the ship fall due on the same date known as _____

Section B

Five Questions of 02 Marks each

11. Enlist the effects of increased beam on GZ.
12. "Loadicator is an indispensable part of a ship's equipment" Explain
13. Write a short note on "Surface preparation".
14. What are Autonomous and Semi Autonomous ships?
15. What are the functions of classification societies?

Section C

Five Questions of 10 Marks.

16. What is the purpose of carrying out an inclining experiment? What are the conditions necessary for its accuracy?
17. What is the damaged stability criteria for passenger ships?
18. What are the features of the enhanced survey program? What does the Survey planning document contain? How is the planning of survey done.
19. MV Vijay enters a SW drydock drawing 3 m Fwd and 5.2 m aft. KG 9 m, FSM 1200 tm . Calculate the virtual GM and the moment of Statical stability at 0.5 deg heel, when she is just about to take to blocks fwd.

Following is the Hydrostatic data from the tables:

A- For mean draft 4.1 m ; AF = 72.113 m

B-

Draft	W (t)	MCTC tm	AF (m)
4.067	7853.1	158.403	72.118

C - Required value of KM = 9.887 m

20. What are the various types of corrosion experienced by the ship?
