

Indian Maritime University
(A Central University, Govt of India)
End Semester Examinations – June 2023

Programme Name: B Sc (NS)

Semester: V

Subject Code: UG21T4503

Subject Name: Ship Maintenance and Emergencies

Date: 08.06.2023	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 most correct answer as applicable.

1. Formation of bubbles on paint surface is known as -----
 - a) Bubbling
 - b) Blistering
 - c) Flaking
 - d) Fading
2. Holystone is soft and brittle sand stone that is used for:-
 - a) Removing loose rust on deck
 - b) Cleaning utensils
 - c) Used for cleaning bridge glass windows
 - d) Scrubbing and whitening the wooden decks
3. The extra plate at the bottom of sounding tube to protect plating from chipping damage is called?
 - a) Striker plate
 - b) Doubler plate
 - c) Bottom plate
 - d) Stiffner plate
4. One advantage of planned maintenance on board is that -----
 - a) It involves less paper work
 - b) There are few breakdowns and repairs
 - c) The vessel has to be dry docked less often

- d) It costs the company more money on the longer run
5. The purpose of an EPIRB is -----
- To enable other vessels to home in on its beacon
 - To enable survivors to talk to searching air craft
 - To assist authorities to locate survivors for search and rescue
 - To be detected by near ships on their radar
6. Sacrificial anodes are usually found -----
- Near the propeller
 - Inside the cargo holds
 - On the main deck
 - Inside fresh water tank
7. When a vessel is removed from water using graving dock, the critical moment of stability occurs:-
- Just before the water level starts falling
 - Just before the vessel settles on the keel blocks forward and aft
 - Just after the dock is completely dry
 - After the vessel settles on the heel block
8. During an annual load-line survey, the surveyor checks _____
- The condition of life-saving appliances
 - The condition of fire-fighting appliances
 - The weather-tight integrity of the vessel
 - Check the bridge equipment
9. Your ship's load line certificate was issued on 1st April 2015 and the expiry date 31st March 2020. Her 1st Annual survey was carried out on 6th May 2016, her 2nd Annual survey was carried out on 2nd Feb 2017. When will her 3rd Annual survey be due with window period?
- 6th May 2018 – Window period 6th Feb'18 to 6th Aug'18
 - 2nd Feb. 2018 - Window period 2nd Nov'17 to 2nd May'18
 - 1st April 2018 - window period 1st Jan '18 to 1st July'18
 - All a, b and c are correct
10. Stringent rules have come into play, mandating the right upkeep of the crew accommodation as well as general welfare on board a ship as per _____
- SOLAS
 - MLC
 - ISPS
 - MARPOL

Section B

Five Questions of 02 Marks each. SHORT ANSWER TYPE QUESTIONS

- Q11. Why is Oil used in rough weather and how does it work?
- Q12. Which are the additional items to be taken to the survival craft during abandoning of the ship?
- Q13. When will you use emergency steering ?
- Q14. What is the purpose of shipboard Planned Maintenance System ?
- Q15 Write down the general defects you will check while inspecting any part of the ship for damages and subsequent maintenance ?

Section C

Seven Questions of 10 Marks each of which any 05 questions to be answered.

- 16. When preparing the surface for painting on deck, what are the precautions you will take a) before chipping and b) after chipping?
- 17. How does the fouling of the ship's bottom effects the ship's performance?
- 18. What is a Muster list? And what are the measures to be taken in emergencies for the protection and safety of the ship?
- 19. What are the precaution prior fumigating the cargo holds to be carried out?
- 20. List the main items which the class surveyor is expected to check while he is carrying out an annual Safety Equipment Survey ?
- 21. What are the points to identify while inspecting the double bottom tanks?
- 22. What are the main purpose of a planned maintenance system?

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