

Indian Maritime University
(A Central University, Govt of India)
End Semester Examinations – December 2025
Programme Name: BSC Nautical Science
Semester: V
Subject Code: UG21T5503
Subject Name: LIFE SAVING & FIRE FIGHTING APPLIANCES

Date: 10.12.2025

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 following is not part of the Lifeboat equipment
a) Hand flares b) Rocket parachute c) Line throwing apparatus d) Buoyant smoke signal
2. FPD is used on
(a) Lifeboats (b) Liferaft (c) Crane (d) Derrick
3. Abandon ship is carried out after -----
a) verbal order of the master b) after seven long and one prolonged alarm c) continuous ringing of the bell d) three prolonged blast on the whistle
4. Fire on a furniture is classified under ----- fire
a) Class A b) Class B c) Class C d) Class D
5. ----- division is a non-combustible, smoke-tight bulkhead or deck that prevents flame spread for at least 15 minutes
a) A-15 b) B-15 c) C-15 d) D-15
6. The purpose of International Shore Connection is -----
a) To assist in firefighting in the jetty b) To assist in fire prevention on ships
 c) To connect the fire main from the engine room to the deck d) To get shore water for firefighting on ships

7. Emergency fire pump shall not be located in -----
a) Engine room b) Steering room c) Outside accommodation d) Deck house

8. Foam extinguishers are most suitable for ----- fire
a) Gas b) Oil c) Wood d) Metal

9. General alarm button is not located at -----
a) outside the accommodation b) Engine room c) Bridge d) Fire control station

10. EEBD's are used for

(a) Abandoning ship (b) Escaping from a fire affected compartment (c)
To release the Lifeboats (d) To inflate a Liferrafts

Section B

Five Questions of 02 Marks each

11. Describe the free-fall launching of a lifeboat
12. Describe fire control stations
13. Define thermal protective aid and explain its uses
14. What are the uses of isolation valves on the fire lines
15. Describe self-Contained Breathing Apparatus

Section C

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

16. Explain SART and its operating procedure and uses as a locating device
17. Define the onload and offload releasing system for the lifeboats. Explain why they are required.
18. Define HRU and how it helps in the auto-launch of the life raft
19. How IG systems, Fire dampers, and ventilators prevent fire from spreading.
20. Describe three types of fire detection sensors and their working principles.
21. Explain use of EEBD for escape and its maintenance?
22. Explain International shore connection and its uses.