

Indian Maritime University
(A Central University, Govt. of India)
End Semester Examinations – December 2024

Programme Name: NS

Semester: V

Subject Code: UG21T5503

Subject Name: LIFE SAVING & FIRE FIGHTING APPLIANCES

Date: 11.12.2024

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. Which of the following is not a life boat equipment?
 - a) Oars
 - b) Hatchet
 - c) Lifejacket
 - d) Sea anchor
2. Fire detectors working on bi-metallic principle are
 - a. Smoke detectors
 - b. Gas detectors
 - c. Heat Detectors
 - d. None of the above
3. Once activated EPIRB continues to transmit up to?
 - a) 6 hours
 - b) 12 hours
 - c) 24 hours
 - d) 48 hours
4. Which is the effective method to deal with a gas fire on main deck?
 - a. Dry Chemical Powder
 - b. Chemical Foam
 - c. Carbo Dioxide
 - d. Mechanical Foam

5. What is the expiry period for the pyrotechnics from the date of manufacture
 - a. 30 months
 - b. 24 months
 - c. 36 months
 - d. 18 months

6. Servicing of life raft is required to be carried out within --- months of last service or date of manufacture?
 - a) 3 months
 - b) 6 months
 - c) 9 months
 - d) 12 months

7. International shore coupling is provided on ship to connect ship's fire line to?
 - a) Engine room
 - b) Main deck
 - c) Shore supply
 - d) Forecastle deck

8. Which of the following techniques is /are used to extinguish a fire?
 - a. Coaling
 - b. Smothering
 - c. Starving
 - d. inhibiting

9. The fuel capacity in lifeboat should be sufficient for
 - a. 6 kts speed and 12 hours duration
 - b. 6 kts speed and 24 hours duration
 - c. 4 kts speed and 12 hours duration
 - d. 4 kts speed and 24 hours duration

10. General alarm on ship is ----?
 - a) Seven or more short blast followed by one long blast
 - b) Continuous ringing of bell
 - c) Three prolong blast
 - d) Verbal order from Master

Section B

Five Questions of 02 Marks each

11. Write short notes on Class A30 bulkhead.
12. Write any two requirements of EPIRB as per SOLAS?
13. What are technical specifications of International Shore Connection?
14. What are the contents of Muster list?

15. Write short notes on SART

Section C

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

16.a) Describe fire detectors and manual call points? (5 Marks)

b) Write a short note on SART? (5 Marks)

17.a. What mandatory markings on a totally enclosed lifeboat. (3 marks)

b. List the inflatable life raft equipment. (7 marks)

18 Draw a neat sketch of international shore connection showing its dimensions. What is the purpose of international shore connection? (10 Marks)

19 a) What are SOLAS requirements for lifebuoy self-igniting lights? (4 marks)

b. What are the SOLAS requirements for thermal protective aid (TPA)? (6 marks)

20 a) Describe A class division. What are class A-60 & class A-15? (5 Marks)

b) What is the difference between TPA & Immersion suit?
(5 Marks)

21 a. What are the specifications (any 5) for the emergency fire pump (5 marks)

b. Explain the automatic launching procedure for an inflatable life raft attached with hydrostatic release unit (HRU). (5 marks)

22. a) Write a short note on Portable foam applicator unit?

(5 marks)

b) Describe techniques used for survival at sea in a survival craft?
(5 Marks)

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