

Indian Maritime University
(A Central University, Govt. of India)
End Semester Examinations – December 2022
Programme Name: B Sc., (NS)
Semester: II
Subject Code: UG21T5205
Subject Name: Ship Operation Technology (SOT)

Date: 01.12.2022

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

All Questions are compulsory in this section
Choose and write the correct answer
Each Carries 1 mark (10x1 = 10 marks)

1. Where would you find a Bulbous Bow onboard a ship?
 - a. Aft most point of a ship
 - b. Mid-ship Section of a Ship
 - c. Forward most point of a ship
 - d. On the Bridge

2. Where the 'MONKEY ISLAND' is situated onboard a ship?
 - a. The deck on top of the Bridge
 - b. An island where 'Monkeys' locked
 - c. The small platform on the Steering Gear Compartment
 - d. The locker where 'Monkey Fists' are stored

3. Under which condition would you discard a Wire Rope?
 - a. Corroded extensively
 - b. Visibly damaged
 - c. Flattened due to Excessive stress
 - d. All the Above

4. Choose the Synthetic fibre rope from the following
 - a. Hemp rope
 - b. Manila rope
 - c. Polypropylene rope
 - d. Wire rope

5. Flag "I" (India) Meaning
 - a. I am altering my course to Port
 - b. I am altering my course to Starboard
 - c. I have a Diver down
 - d. Vessel is ready to depart

6. Flag "O" (Oscar) Meaning
 - a. I am on fire and have dangerous goods onboard
 - b. My vessel is 'healthy' and I request free Pratique
 - c. Man Overboard
 - d. I am operating astern propulsion

7. Working Aloft means
 - a. Working inside Double Bottom Tanks
 - b. Working in Wheel House
 - c. Working in Main Engine
 - d. Working on Heights

8. Pneumatic tools are operated by
 - a. Compressed Air
 - b. Electricity
 - c. Hydraulic power
 - d. Battery

9. 'Hot Work Permit' is issued onboard by
 - a. Chief Officer
 - b. Chief Engineer
 - c. Master
 - d. Safety Officer

10. 'Safety Officer' of a ship is chosen by the
 - a. Master
 - b. Safety Committee
 - c. Company Superintendent
 - d. Designated person Ashore

Section B

All Questions are compulsory in this section

Each Questions carries 2 Marks each (5x2=10)

Write short notes on following:

11. Collision Bulkhead
12. Rope Stoppers
13. Courtesy Flag
14. Precaution using Hand Tools
15. Safety committee meetings

Section C

Answer five out of seven questions.

Each Question carries (10 Marks Each)

16.

- a. Enlist at least ten important parts of a ship
- b. Explain briefly Personal Protective Equipment (PPE) (2 x 5 = 10 marks)

17.

- a. Describe different types of Fibre Ropes
- b. Explain, Care and maintenance of Wire Ropes (2 x 5 = 10 marks)

18.

- a. State type of Ensigns and penalty for not using or wrongly using an Ensign.
- b. Explain Pilot Flag and Quarantine Flag. (2 x 5 = 10 marks)

19.

- a. List the precautions while entering (confined) Enclosed space.
- b. List precautions while repairing RADAR (2 x 5 = 10 marks)

20.

- a. Your ship is calling "Singapore" Outer Anchorage for Bunkers, describe what all safe bunkering practices you will adopt as duty officer onboard ship?

b. Explain Why? It is important to create a Checklist for Critical tasks onboard ship?

(2 x 5 = 10 marks)

21.

a. Explain importance of personnel health and hygiene on board ship.

b. Explain different types of permits used onboard ship.

(2 x 5 = 10 marks)

22.

a. Explain in your own words 'Hot Work Permit' when, how and from whom it is obtained.

b. Create a Typical 'Hot Work Permit' used on a merchant vessel.

(2 x 5 = 10 marks)

Tolani