

**Indian Maritime University**  
**(A Central University, Govt. of India)**  
**End Semester Examinations – June 2025**

**Programme Name: B Sc (NS)**

**Semester: VI**

**Subject Code: UG21T5604**

**Subject Name: SHIP MANOEUVRING & COLLISION PREVENTION  
REGULATIONS**

Date: 06.06.2025	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. Hawse pipe is located between
  - a. Windlass and chain locker
  - b. Windlass and bow chain stopper
  - c. At the front end of the ship on the centerline through which we pass mooring ropes
  - d. Bow chain stopper and shipside
2. Marking of the vessel's anchor cable starts from the
  - a. Bitter end towards the anchor end
  - b. Anchor end towards the bitter end
  - c. Centre of the chain cable towards the bitter end
  - d. Centre of the chain cable towards the anchor end
3. The most vulnerable parts of the ship when in ice infested waters are
  - a. Accommodation Ladders
  - b. Anchors
  - c. Lifeboats
  - d. Propellor and Rudder
4. Latest MEG recommended replacement interval of mooring rope tails is
  - a. 24 months

- b. 21 months
  - c. 18 months
  - d. 15 months
5. Yawing of the vessel at sea when navigating is due to the
- a. Effect of wind and current
  - b. Defect in the autopilot system
  - c. Impossibility of steering an absolute steady course
  - d. Defect in the vessel's rudder
6. The Under Keel Clearance (UKC) of a vessel is the
- a. Difference between draught and free board
  - b. Distance from the ship's keel to the seabed
  - c. Difference between depth of water and height of tide
  - d. Difference between height of tide and ship's draught
7. A vessel engaged in fishing shall exhibit by day
- a. Two cones apex together in a vertical line
  - b. Two cones base together in a vertical line
  - c. One cone at aft and one forward with apex downward
  - d. One cone at aft and one forward with apex upward
8. Mixed mooring system is
- a. A mooring system that combines both traditional and modern techniques
  - b. A mooring system that involves both fixed and floating structures
  - c. A mooring system that utilizes both active and passive stabilization devices
  - d. A mooring system using both soft ropes and wires with different SWL
9. The main factor affecting the ship's squat is
- a. Ship's Draught
  - b. Ship's Speed
  - c. Ship's Trim & List
  - d. Ship's Ship's Free board
10. Weighing an anchor means
- a. Checking the weight if the anchor
  - b. To lift the anchor
  - c. To lower the anchor
  - d. Anchor is fouled and cannot be lifted

### **Section B**

Five Questions of 02 Marks each

- 11. Write short notes on 'Bank Suction' and 'Bow Cushion' effect
- 12. Define the term " Advance " in ship's maneuvering.
- 13. Define vessel constrained by her draught.
- 14. Describe Importance of Annexs in Collision Prevention regulations
- 15. What are the different markings on the anchor chain cable

### Section C

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

- 16 a. Discuss the factors affecting the turning circle of a ship. (7marks)  
16 b. Discuss the effects of ice accretion on the ship's stability (3 marks)
- 17 a. State the factors involved in deciding the length of cable to be used when anchoring. (3 marks)  
17 b. Describe precautions for Embarkation and Disembarkation of pilot. (7 marks)
- 18 a. List the recommended procedure for anchoring in shallow waters and deep waters (7 marks)  
18 b. List the mandatory markings on mooring winches (3 marks)
19. Describe your Immediate Action in case of man over board and explain Williamson Turn. (10 marks)
- 20 a. List the initial steps you will take in case of steering failure (6 marks)  
20 b. Write short notes on citadel (4 marks)
- 21 a. Define Safe Speed as per Col Regs Rule No-6, and factors to be taken into consideration. (4 marks)  
21 b. Describe your Immediate action in case of Collision at sea with respect to Contingency Plan. (6 marks)
- 22 a. List the steps to take when approaching an area of restricted visibility (7 marks)  
22 b. List the factors to consider when deciding the length of anchor chain cable to use while anchoring (3 marks)

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