

**Indian Maritime University**

(A Central University, Government Of India)

Jun 2022, End Semester Examination

B. Sc (Nautical Science), Semester: VI

Ship Maneuvering & Collision Prevention Regulations (UG21T4603)

Date:06.06.2022

Maximum Marks: 70

Time: 3 Hrs

Pass Marks: 35

---

**Section-A, Question 1 & 2, Are compulsory and carry 10 Marks each**

Q.No.1, MCQ- Select right answer from the given options.(1x10=10 marks)

- (I)- Lug-less joining shackle is device used onboard ship to
- a) Join wire rope with mooring hawser
  - b) Join towing rope with anchor cable
  - c) Join two shackles together
  - d) Join mooring hawser with chain cable
- (II)- When anchoring a vessel the order "Let Go" means
- a) To tighten the windlass brake
  - b) To allow to run out the anchor & chain by releasing the brake
  - c) To increase the speed of the windlass
  - d) To keep clear of the anchor chain
- (III)-A standard mooring plan of the in port will have
- a) 5 ropes
  - b) 4 ropes
  - c) 6 ropes
  - d) 8 ropes
- (IV)-When a vessel is at anchor the bow stopper relieves the stress on the
- a) Windlass brake
  - b) Spurling pipe
  - c) Warping drum
  - d) Hawse pipe
- (V) -The under keel clearance (UKC) of a vessel is the
- a) Difference between the draught and freeboard
  - b) Distance from the seabed to the ship's keel
  - c) Difference between the depth of water and height of tide
  - d) Difference between height of tide and ship' draught
- (VI)- Which of the following is not the maneuvering data of a vessel
- a) Advance
  - b) Drift Angle
  - c) Transfer
  - d) Draught
- (VII)-The main factor affecting the ship's squat is
- a) Ship's freeboard
  - b) Ship's draught
  - c) Ship's speed
  - d) Ship's trim & list

- (VIII)-In ship's Mooring Winch System warping drum is used for
- Lowering & hoisting the ship's anchor
  - Transferring the weight of the ropes
  - Passing the mooring hawser to the tug for pulling the ship
  - Pulling the ship alongside to the berth
- (IX) -Breast rope in the mooring system is to prevent the ship from moving
- Astern
  - Ahead
  - Away from the berth
  - Ahead & astern direction
- (X) -The responsible officer at the pilot boarding area should ensure that
- The pilot is wearing proper personal protective equipments
  - The pilot ladder is secured properly
  - The ship is in the middle of the channel
  - The ship is not listed port or starboard

### **Section - B**

Q. No. 2, Short answer type questions (2x5 =10 Marks)

- Explain the use of "Windlass" in Mooring Winch System.
- Define the term "Transfer" in ship maneuvering.
- Describe the use of mooring winches onboard ship.
- Describe 10 distress signals as per Annex-IV of Collision Regulations.
- State your action "In- case of your ship's Engine Failure".

### **Section-C, Answer any 5 questions out of 7, all carry 10 marks each.**

- Q. No-3,(I)-Define the term "Cable Up & down" in anchoring a ship.  
(II)-Define the term "Weighing Anchor" in ship's maneuvering.
- Q. No-4,(I)-State the factors involved in deciding the length of cable to be used when anchoring a vessel.  
(II)-Describe precautions for Embarkation & Disembarkation of pilot.
- Q.No-5,(I)-Define the term Drift Angle & Head reach in ship maneuvering.  
(II)-Define "Piracy" and describe precautions when navigating in Piracy Prone area.
- Q. No-6,Describe your action in case of Man Over Board your ship & explain Williamson turn.
- Q. No-7,Define the Mooring plan and Care & Maintenance of mooring ropes.
- Q. No-8,(I)-Define Safe Speed as per Col Reg Rule No-6, and factors to be taken into consideration.  
(II)-Describe contingency plan for collision at sea.
- Q. No-9,(I),Define (Blind Navigation) navigation in restricted visibility and precautions you will take.  
(II)-With respect to Collision Prevention Regulations, Rule No-19, explain the term "a power driven vessel shall have her engine ready for immediate maneuver.

\*\*\*\*\*