

Indian Maritime University

(A Central University, Govt of India)

B.SC (Nautical Science)

May/June 2018 End Semester Examinations

Semester VI

Bridge Equipment, Watch keeping & Collision Prevention Paper VI- UG21T2602

Time: 3 Hours

Max Marks: 70

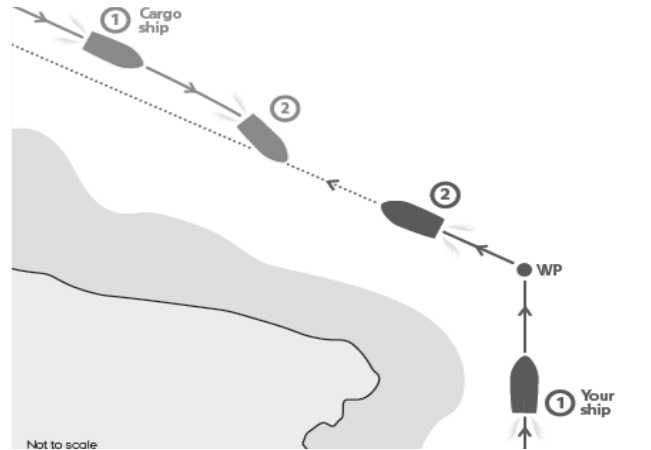
Date: 06.06.2018

Pass Marks: 35

Note: Question No. 7 is compulsory, attempt any six questions from remaining seven. All carry marks 10 each.

1. Explain the following: **(2x5=10)**
 - (a) Explain how you will carry out maintenance of a liquid card compass.
 - (b) Describe three basic elements of Earth's magnetism.
2. What is heeling error effect in a magnetic compass and how is it corrected? **(10)**
3. Compare and Contrast, ECDIS with Paper Charts. **(10)**
4. Why are we having LRIT when we have AIS? Who all are the authorised recipients of the LRIT information? **(10)**
5. What is Blind Navigation/Pilotage, and various techniques associated with it. **(10)**
6. Explain the following: **(2x5=10)**
 - (a) Bridge Resource Management.
 - (b) Objectives of Bridge Resource Management.
7. When determining the safe speed of a vessel as per Rule No. 6 of COLREG, what factors shall be taken into consideration. **(5x2=10)**
 - (a) By all vessels.
 - (b) Vessels fitted with operational radar.

8. Scenario



Your vessel is rounding a headland and approaching a waypoint for an alteration to port. A cargo ship is approaching the headland from the other direction. The ships are now in position 1. The cargo ship sees your port aspect and alters course to starboard as the 'give-way' vessel. You are unaware of its alteration and so you alter course to port to follow your passage plan. You want to keep to your passage plan. The ships are now in position 2.

QUESTIONS

(a). What action should you have taken at position 1?

(b). What action should you take now, at position 2?

(10)

9. List out ten distress signals used or exhibited by a vessel in distress and in need of assistance.

(10)