

# Indian Maritime University

(A Central University, Govt of India)

## B.SC (Nautical Science)

May/June 2018 End Semester Examinations

Semester IV

### Bridge Equipment, Watch Keeping & Collision Prevention-IV

UG21T2407

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Time: 3 Hours

Max Marks: 70

Date: 18.06.2018

Pass Marks: 35

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Question no.1 is compulsory

Attempt any 6 out of the remaining questions.

All questions carry equal marks

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1. A vessel on course 340 deg (T) at 15 knots speed, detects a target at 0800 hrs bearing 020 deg (T) and range 12 M. At 0812 hrs same target bore 017 deg (T) and range 9 M.  
Find the Course, Speed, CPA, TCPA and Aspect of the vessel at 0812 hrs. **(10)**
2. (a) Write down the various controls used on the display of a radar set **(5)**  
(b) What is the Performance Standards of a radar set with respect to operation **(5)**
3. What are the various segments of Global Positioning System (GPS) and write down its various errors. **(10)**
4. Write short notes on the following: **(2x5=10)**  
(a) S A R T  
(b) R A C O N
5. Describe various types of Shapes and Sound Signalling Appliances used on board ship for navigation purpose. **(10)**
6. Which all are the lights a vessel more than 50 meters in length when under way will show and draw their horizontal sectors of visibility. **(10)**
7. Describe the following: **(2x5=10)**  
(a) Action on receiving storm warning.  
(b) Entries made in the bridge log book when navigating at sea.
8. Explain the following: **(2x5=10)**  
(a) How you will keep an effective anchor watch, when the vessel is at anchor.  
(b) Contents of the Bridge Procedure Guide