

**INDIAN MARITIME UNIVERSITY**  
[A Central University, Govt of India]  
**B.Sc., [NS] from 2013 batch onwards – Semester VI**  
**Bridge Equipment, Watch Keeping & Col. Reg - VI**  
**Sub Code: UG21T2602**

**June 2016 End Semester Examinations**

**Duration: 3 hrs**

**Marks: 70**

**Date: 11.06.2016**

**Pass Marks: 35**

**Answer any seven questions. All questions carries equal marks      7x10 = 70 marks**

1. Explain the effect of earth magnetism and Ships' mild steel on ship's compass and name the various correctors to be utilized for compensating the effect of navigation.  
(10 marks)
2. a. Explain Heeling error effect on magnetic compass and method of correcting the same.  
(6 Marks)  
  
b. Write in brief about the care and maintenance of Liquid Card Compass. (4 Marks)
3. a. Describe Electronic Chart Display and Information System (ECDIS) (5 Marks)  
  
b. Differentiate between Raster and Vector chart (5 Marks)
4. Write in brief the purpose of Long Range Identification and tracking system (LRIT) and the data transmitted by LRIT.  
(10 Marks)
5. Describe in detail the methods of obtaining a table of Deviations on board ships. (10 marks)
6. What do you understand by the term "Blind navigation technique"? Explain about various equipments and methods to be utilized for navigation in poor visibility. (10 marks)
7. Explain the meaning of situational awareness in context of Bridge Resource Management.  
  
With suitable example write down the importance of effective communication and assertiveness.  
(10 Marks)

8. Explain the duties of Officer of the Watch (OOW)
- a. After receiving the Storm Warning (5 Marks)
  - b. While Navigating with Pilot onboard (5 Marks)
9. (a) List all the Distress Signals as per the Annexure IV of COLREG (8 Marks)
- (b) Write down name of two incidents of collision due to not following COLREG. (2 Marks)

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