

**INDIAN MARITIME UNIVERSITY**

(A Central University Government of India)

**Diploma in Nautical Science**

**Semester-II**

**June/July 2019 End Semester Examination**

**Emergencies, Maritime Communication and Maritime Commerce**

**(UD11T1202)**

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**Time: 2 Hours**

**Date: 25.06.2019**

**Max Marks: 70**

**Pass Marks: 28**

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**Note: 1. Section A – Question 1 is compulsory. Answer any 3 questions from the balance 4**  
**2. Section B – Answer any 3 questions out of 4**  
**3. All questions carry equal marks**  
**4. Ship's Weather Code 1982 is permitted to be used**

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**PART-A**

**Question 1 is compulsory. Answer any 3 questions from the rest 4**

**Q.1**

(a) What is "Safe Speed" as per COLREGS? (5 Marks)

(b) Under Rule 19 of COLREGS, what is the regulation for alteration of course to avoid a risk of collision, when a vessel detects by radar alone the presence of another vessel? (5 Marks)

**Q. 2**

(a) With the help of a diagram explain the working principle of Electro Magnetic Speed Log (5 Marks)

(b) What do you understand by the term "Bridge Resource Management" (BRM) and what are the resources available for BRM? (5 Marks)

**Q.3**

(a) List the watch keeping duties required to be carried out by OOW when the ship is at anchor (5 Marks)

(b) State the procedure for changing over the steering from Manual mode to Auto Pilot mode. (5 Marks)

**Q.4**

- (a) Explain various alarms provided in a GPS system (5 Marks)
- (b) What are the points to be considered while filling up various log books? (5 Marks)

**Q.5**

- (a) What is an AIS and list the static data displayed by it ` (5 Marks)
- (b) State 10 important occasion, when OOW should call the Master on the bridge (5 Marks)

**PART-B**

**Question 1 is compulsory. Answer any 2 questions from the rest 3**

**Q.6** Decode the following weather report:

BBXX	ATVH	10123	99408	30492	41398
62828	10143	20082	40084	56028	76364
84364	22234	00175	20808	302//	41006

(10 Marks)

**Q.7**

- (a) What are "Sea Breeze" and "Land Breeze"? (5 Marks)
- (b) Explain the forces that determine the speed and direction of winds (5 Marks)

**Q.8**

- (a) With respect to Tropical revolving storms define following : (5 x 1 = 5 Marks)
- 1) Path.
  - 2) Trough
  - 3) Dangerous semi-circle
  - 4) Vertex
  - 5) Eye
- (b) Describe the main causes of ocean currents. (5 Marks)

**Q.9**

(a) What is a "Front"? Briefly describe the types of Fronts (5 Marks)

(b) What are the three classifications of clouds on the basis of heights? Name different clouds under these classifications (5 Marks)

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**End of Question paper**

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