

**INDIAN MARITIME UNIVERSITY**  
(A Central University, Govt. of India)  
**End Semester Examinations –June-July 2019**  
**B. Tech (Marine Engineering)**  
**Semester-II**  
**Seamanship, Elementary Navigation & Survival at sea**  
**(UG11T3201)**

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**Date: 25<sup>th</sup> June 2019**  
**Time: 03 Hrs.**

**Max Marks: 100**  
**Pass Marks: 50**

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**Part-A**  
**(All Questions Are Compulsory)**

**Marks 3x10=30**

1. (a) What is HRU with respect to float free life raft?  
(b) List the crew required for launching Lifeboat (Gravity Davit), along with their duties.  
(c) What is Radar, state its use on board Ships?  
(d) Explain the following Terms: - Forecastle, Poop Deck, Monkey island.  
(e) What are the types of rope used on ships?  
(f) What are the alarms mentioned in the muster list?  
(g) What are the meaning of flags representing: - B, P, H.  
(h) What is a Compass & types of compasses found on board ship?  
(i) What are names of mooring line used to moor a ship alongside a jetty?  
(j) How is look out kept at Sea, Discuss with watch schedule?

**Part- B** **Marks: 5x14=70**  
**(Answer Any Five of the following Questions)**

2. (a) What is MARPOL Convention & list the annexures to the convention?  
(b) What is ISPS code, state the aim of the code? (8+6)
3. (a) How will you launch a throw overboard Life raft?  
(b) What do you understand by Navigation Bridge, Describe any two Bridge Equipment's (8+6)
4. (a) List the shipboard departments / Organization  
(b) With simple sketch describe various parts of a vessel. (8+6)
5. (a) How is the globe divided with international time, what is GMT?  
(b) Name the equipment's available in the lifeboat (8+6)
6. (a) With the help of a sketch describe the navigational light (name, range, arc of visibility, colour)

(b) What is Immersion Suit, and state its use.

(8+6)

**7.** (a) Sketch and describe the Parts of Stockless anchor?

(b) How will you conduct an abandon ship drill?.

(8+6)

**8.** (a) Discuss the Maintenance and care of steel Synthetic rope.

(b) State the use of following.

Heaving line, Rat guard and Mooring Hawser?

(8+6)

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