

INDIAN MARITIME UNIVERSITY

(A Central University, Government of India)

End Semester Examination June / July 2019

B.Tech (Marine Engineering)

Semester – II

**Seamanship, Elementary Navigation & Survival at sea
(UG11T1201/UG11T2201)**

Date: 25-06-2019

Time: 3 Hrs

Maximum Marks: 100

Pass Marks: 50

PART –A

(10 X 3 = 30 Marks)

(All are Compulsory Questions)

1. a. Define the following terms
(i) Accommodation Ladder, (ii) Bilge, (iii) Keel
- b. What is HRU with respect to life raft?
- c. What are "Heaving Line" and "Mooring Line"?
- d. Name six navigational instruments used on board ships.
- e. What is Thermal Protective Aid and write its specification.
- f. Why does modern ship prefer to have stockless anchor?
- g. What are the functions of "Tricing Pendants" and "Bowsing in Tackle" in a life boat?
- h. What are the alarms mentioned in Muster List?
- i. Name different type of Anchors.
- j. What are the objectives of STCW and when it was amended last?

PART B

5 X 14 Marks = 70 Marks

(Answer any 5 of the following)

- 2 (a). Draw a simple sketch of a vessel and label its parts. (7)
- (b). Explain the types of mooring ropes used on ships. (7)
- 3 (a). Draw a stockless anchor and label its parts. (5 + 2)

- 4 (a). Explain the following terms: (i) Sextant, (ii) Navigation Compasses, (iii) Echo Sounder, (iv) G.M.T. (7)
- (b). Describe the role of Chief Engineer on Board. (7)
5. Describe the different methods of launching of Inflatable type Life Raft (14)
6. What is Master List? How an Abandon Ship Drill is conducted on Board a Vessel? (14)
7. What does MARPOL deal with? Explain its various annexes in details (2 + 12)
- 8 (a). Why does a vessel display Navigational Lights and Shapes? Describe in Brief different navigational lights. (7)
- (b). Write short notes on Flag Signalling, Morse Signalling and Sound Signalling. (7)