

Indian Maritime University

(A Central University, Govt of India)

May-June 2018 End Semester Examinations

B. Tech (Marine Engineering)

Semester-II

Seamanship, Elementary navigation & Survival at Sea (UG11T3201)

Date: 09.06.2018

Max Marks:100 Marks

Time: 3 Hrs

Pass Marks: 50 Marks

Part- A

(All questions are Compulsory)

1. a. What are the Pyrotechnics carried on Navigation Bridge? **Marks 3 x 10 = 30**
- b. What is SOPEP ?
- c. Name Types of splices done on a rope.
- d. Describe MUSTER STATION.
- e. What are the different types of anchors used on merchant ships?
- f. What is Rat Guard, where is it used? What is the use of it?
- g. Name the MARPOL annexes that are in force.
- h. describe briefly about Free-fall lifeboat.
- i. What is bitter-end of Anchor cable? Explain.
- j. Describe briefly SART & EPIRB.

Part-B

(Answer any 5 of the following Questions) Marks: 5 x 14 = 70

2. Explain in detail the ship's organizational structure. (14)
3. Why do ships carry Anchors? Draw a Stockless anchor & label its parts.(14)
4. Name any five Navigational Equipment inside Navigation Bridge & briefly describe their purpose. (14)

5. Draw a profile view (neatly) of a cargo ship & label various compartment on it. (14)
6. How do you Care & Maintenance of
(i) Natural fibre rope (ii) Steel wire rope. (7+7)
7. Describe following navigation lights w.r.t. their position on board, colour, & arc of visibility;
(i) Mast headlight (ii) portside light (iii) starboard side light (iv) Stern light
(v) All-round Light (14)
8. Describe various security levels as per ISPS code. Describe Role of Ship Security Officer. (14)
-