

INDIAN MARITIME UNIVERSITY
(A Central University, Government of India)
End Semester Examination Dec 2019/Jan 2020
B Tech (Marine Engineering)
Semester –II

UG11T3201 – Seamanship, Elementary Navigation and Survival at Sea

Date: 31.12.2019

Max Marks: 70

Time: 3 Hours

Pass Marks: 35

Part – A (compulsory)

Answer the following (10x2=20 Marks)

- 1) Explore the ranks on Engine Department in merchant ships?
- 2) Define the term "Stem" and "Port side of a ship"?
- 3) What are all the Navigation lights a vessel "underway" should display at night?
- 4) What are all types of Natural Fibre Ropes available in use on Merchant ships?
- 5) What do you mean by "Anchor aweigh"?
- 6) Define Principle of Sextant?
- 7) What are the alarms mentioned in the muster list?
- 8) What are different types of pyrotechnics available on board ships and state the requirements of each as per SOLAS convention?
- 9) How to take compass bearing?
- 10) What are the "Rest Hours" According to STCW 2010?

Part – B

Answer any 5 out of 7 questions (5 x 10= 50 marks)

- 11) a) Draw a flow chart of Ship board Organization? (5 marks)
b) What are the duties of Trainee marine engineer on board merchant ship? (5 marks)
- 12) a) Describe the different ships type and their functions. (5 marks)
b) List out name of machineries/equipment's seen in an engine room of a ship. (5 marks)
- 13) What maintenance, care and precautions are to be taken, with synthetic fibre ropes used on board ships? (10 marks)
- 14) What is MARPOL Convention & list the annexures to the convention? (10 marks)
- 15) What are the lights exhibited by a power driven vessel at sea underway and name their arcs of visibility? Draw a neat sketch. (10 marks)
- 16) Sketch and describe a Parts of Stockless anchor? (10 Marks)
- 17) Enumerate the precautions taken before encountering rough weather? (10 marks)