

INDIAN MARITIME UNIVERSITY
(A Central University Government of India)
End Semester Examination June -July 2019
B Sc (Nautical Science)
Semester IV
Ship Maintenance and Emergencies
UG21T3404

Date : 01.07.2019

Max Marks : 70 Marks

Duration : 3 Hrs

Pass Mark : 35 Marks

Note: Question No. 1 is compulsory.

Answer any 6 questions from remaining 8 questions (each of 10 marks).

Scientific Calculator is permitted if required.

Q.1 (2 x 5 =10 M)

- (a) State different types turns used to pick up Man Overboard.
- (b) State different types of Search Patterns as per IAMSAR.
- (c) State the 3 sides of fire triangle.
- (d) State to what degrees of list of ship on either side should a survival craft be capable of being launched.
- (e) State a ship has to drydocked how many times in a period of 5 years.

Q2. (a) What are the causes of paint failures? (5M)

(b) Explain the paints used on the ship for: Superstructure, Deck, Hull(Topside), Hull(Boot top) and Hull(bottom). (5M)

Q3. (a) Explain the inspection and maintenance to be done for hull of ship. (5M)

(b) Explain inspection and maintenance to be carried out on Fore peak tank. (5M)

Q4. (a) Explain the reasons and uses of Planned Maintenance System (PMS)

(b) Describe the Maintenances of hatch covers as per PMS (5M)

Q5. Write in detail actions to be taken in case of Grounding of a vessel. (10M)

Q6. (a) Explain the Expanding Square Search pattern as per IAMSAR. (5M)

(b) Explain the Williamson Turn for Man overboard along with advantages and disadvantages. (5M)

Q.7. (a) Explain the planning and preparation for ship to enter the drydock. (5M)

(b) What are the routine repairs done in the dry dock. (5M)

- Q8. (a) Write a short note on need of fumigation and different methods of fumigation used on ships. (5M)
- (b) Write about the Safety precautions to be taken by ship's crew while fumigating on board. (5M)
- Q.9. (a) What preparations are required to be done prior to a Safety Equipment Survey on board. (5M)
- (b) What preparations are required to be done prior to a IOPP Survey on board. (5M)
