

Indian Maritime University

(A Central University, Govt of India)

May-June 2018 End Semester Examinations

B. Tech (Marine Engineering)

Semester-VII/VIII

Engine Room Management (UG11T2705 / UG11T1805)

Date: 19.06.2018

Max Marks:100 Marks

Time: 3 Hrs

Pass Marks:50 Marks

PART – A

Marks: 10 x 3 =30

(All Questions are compulsory)

1. a) Explain Emergency Steering.
- b) What precautions will you take before entering a enclosed space?
- c) Explain reasons for pre-heating of Main Engine Jacket cooling water prior sailing
- d) Explain difference between sounding and ullage.
- e) What is a Quick Closing Valve? Why is it used in ER?
- f) What are the important parameters to be checked when Main Engine is running?
- g) What system of Watch keeping is usually adopted on board in a traditionally manned vessel?
- h) Why do Lub Oil samples need to be sent for analysis?
- i) Explain the significance of Engine room Log book.
- j) While on normal duty in the Engine Room, what are the personal protective equipments (PPE) to be worn.

Part – B

Marks: 5 x 14 =70

(Answer any 5 of the following 7 Questions)

2. Discuss preparation for sailing 24 hours and 2 hours prior to departure from port. (14 Marks)
3. a) What are the safety precautions will you take before and during bunkering of residual fuel on a ship? (10 Marks)
- b) What are the details entered in the 'Bunker Delivery Note' (BDN)? (4 Marks)

4. What are the important points to be considered for preparation of maintenance schedule of machinery? (14 Marks)
5. With respect to Inventory management of spare parts, explain the basic principles of ABC analysis. (14 Marks)
6. With respect to monitoring of main engine performance, explain the importance of taking Indicator cards with suitable sketches. (14 Marks)
7. a) Discuss how a vessel can be prepared for Dry-Docking and state the safeties you must follow in Dry-Dock (7 Marks)
b) Discuss inspection, repair and maintenance of important areas of a cargo vessel in Dry-Dock (7 Marks)
8. a) Explain the conditions under which Oily Mixtures may be discharged into the sea from an Engine Room Bilge, as per MARPOL Annex I. (4 Marks)
b) With a simple sketch explain the working of on Oily Water Separator (10 Marks)