

Indian Maritime University
(A Central University, Govt. Of India)
End Semester Examination Dec-2019/Jan-2020
B. Tech(Marine Engineering)
Semester -IV
Ship Structure & Construction
(UG11T1401/2401)

Date: 30-12-2019

Max Marks: **70**

Time: 3 Hrs

Pass Marks: **35**

Part – A (compulsory)

Answer the following (10x2=20 Marks)

1. Explain about Dynamic Hogging & Sagging stresses.
2. Define Forward & After perpendiculars.
3. Explain about lines plan drawing?
4. Where & why hatch coaming is fitted to the ship?
5. What is a Bulkhead? What are the functions it serves?
6. What do you understand by NDT? List any **four** NDTs used in shipbuilding.
7. Sketch section of Bulwark (through bulwark stay) & label it.
8. What is bow thruster?
9. Define Camber & Flare.
10. Explain about stealer strake and sheer strake?

Part – B

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

11.
 - a) Differentiate between longitudinal & transverse framing systems adopted for ship construction.
 - b) Sketch section through longitudinally framed double bottom of a ship at solid floor. (5+5)
12.
 - a) Sketch load lines marks for a ship & label it.
 - b) What is the importance of such marks? (5+5)
13. What do you understand by Classification Society? What is their role in the design, construction & operation of vessels? (10)
14. Explain about various stresses experienced by a ship when sailing. (10)
15. Explain about various structural sections used in shipbuilding. (any five) (10)
16. Draw typical half mid-ship section of a bulk carrier & mark all the structural elements. (10)
17. Explain about Hold drainage system provided in ships with appropriate sketch. (10)
