

INDIAN MARITIME UNIVERSITY
(A Central University Government of India)
End Semester Examination June-July 2019
B.Sc (Nautical Science)
Semester: I
GENERAL SHIP KNOWLEDGE
(UG21T3105)

Date: 18-07-2019

Max.Marks: 70

Time: 3 hours

Pass Marks: 35

Note: Question No. 1 is compulsory.

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

Scientific Calculator is permitted if required.

Q.1

(2 x 5 = 10 marks)

Define Breadth extreme

- a) State purpose of Deck line
 - b)** Define air draft
 - c) State purpose of Airpipes
 - d) Define forward perpendicular
- Q2. (a) Describe special design features of a crude oil tanker (5 marks)
- (b) Give 2 examples of cargoes loaded on following ships (5 marks)
1. General cargo ship
 2. RO-RO ship
 3. Petroleum product tanker
 4. LPG tanker
 5. Refer ship
- Q3. (a) Draw a neat diagram showing Deck line, Plimsoll line and load line markings T, S, W, TF, and F (5 marks)
- (b) Describe equipment and tools found in Engine room workshop (5 marks)
- Q4. (a) Draw a side view of a ship and mark following (5 marks)
1. Length overall
 2. Length between perpendiculars
 3. Depth of ship
 4. Amidships
 5. Air draft
- (b) Draw a midship cross section of a ship and mark following.(5 marks)
1. Freeboard
 2. Camber of deck
 3. Rise of floor
 4. Tumblehome
 5. Bilge radius
- Q5. (a) Draw side view of ship and mark following (5 marks)
1. Forecastle deck

2. Quarter deck
 3. Cargo holds
 4. Double bottom tanks
 5. Bow or Stem
- (b) Draw cross section of a ship and mark following (5 marks)
1. Hatch cover
 2. Main deck or upper deck or weather deck
 3. Shell Plating
 4. Tween deck
 5. Duct keel
- Q.6. (a) Describe various aspects of accommodation as a comfortable place for living (5 marks)
- (b) Describe impact of tides on ships (5 marks)
- Q.7. (a) Draw Midship section layout of a General cargo ship (10 marks)
- Q.8. (a) Describe purpose of a double bottom tank (10 marks)
- Q.9. (a) Draw a neat diagram of a tank showing sounding pipes (10 marks) and air pipes. Also explain purpose of sounding pipe, Striker plate and Air pipes
