

INDIAN MARITIME UNIVERSITY
(Central University, Government of India)

May/June 2016 End Semester Examinations
B.Tech. (Marine Engineering)

Second Semester – Seamanship, Elementary Navigation & Survival at Sea
(UG11 T2201/T1201)

Date : 08.06.2016
Time: 3 Hrs

Max Marks: 100
Pass Marks: 50

Part-A
Compulsory Question

(3 x 10 = 30 Marks)

1. a) What are "Heaving Line", "Mooring Line" and "Messenger"?
- b) How many numbers of life jackets are to be carried on a cargo ship as per SOLAS?
- c) What are the objectives of STCW Convention and when it was amended last?
- d) What is a thermal protective aid and write its specifications.
- e) How many types of international code flag are required in the wheel house of a foreign going ship? State the meaning of flag E, Q, S & W
- f) What do you understand by Cardinal Point, Inter cardinal Point & By Point in a mariners compass?
- g) Explain GMT & Zone time.
- h) List the names of three department on Board a merchant ship?
- i) Name three kinds of knots and bends?
- j) What is Recue Boat?

Part-B
Answer any Five Questions

(14 x 5 =70 Marks)

- 2) Describe the purpose of the following navigational equipments with the principle of its working:-
i) Marine Sextant ii) Echo Sounder iii) Gyro Compass (14)
- 3) Describe with a simple sketch the various parts of a sea going vessel. (14)
- 4) Explain the purpose of following conventions / code:
(i) SOLAS (ii) STCW (iii) ISPS (iv) MARPOL (14)
- 5) a) What maintenance, care and precautions are to be taken, with steel wire ropes used on board ships?
b) Discuss in brief, the precautionary measures taken, while heaving and dropping the anchor. (7+7)
- 6) a) How is the anchor of a ship secured at sea? Discuss with necessary sketch.
b) Explain the technique of throwing a Heaving line. (10+4)
- 7) How do you differentiate a Life Boat with an Ordinary Boat? Mention at least ten items, to be carried in a life boat. Make a list of pyrotechniques also to be carried in the boat. (6+4+4)
- 8) a) Draw a block diagram of showing the typical layout of the bridge?
b) Describe the preparation for arrival/departure checklist of a ship? (6+8)
