#### INDIAN MARITIME UNIVERSITY

(A Central University, Government of India)

# End Semester Examination Dec 2019/Jan 2020 B Tech (Marine Engineering) Semester –II

# UG11T1201/2201- Seamanship, Elementary Navigation and Survival at Sea

Date: 31.12.2019 Max Marks: 70
Time: 3 Hours Pass Marks: 35

### <u>Part – A (compulsory)</u> Answer the following (10x2=20 Marks)

- Where are these area located on board Poop deck , Fore castle and bridge.
- 2) What are the bad weather precaution taken in the engine room?
- 3) What is the use of canvas on board ship?
- 4) What is the function of cable stopper?
- 5) How many numbers of stars are visible with naked eye? Among them how many Selected stars having special status in the field of celestial navigation.
- 6) What is time zone?
- 7) What is rescue boat?
- 8) What is master list?
- 9) What are the pyrotechnics carried in a life raft.
- 10) What is ISPS code?

#### Part - B

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

- 11. a) Discuss the Maintenance and care of steel wire rope. b) What is the function of a mooring system? (8+2)12. a) Describe 3 important safety drills and exercise carried out on board of a merchant ship? b) How HRU functions in a life raft? (7+3)13. a) Briefly discuss the convention MARPOL and STCW. (10)14. a) What all life saving equipment's are there in a life raft? b) What all marking are there in inflatable life raft? (8+2)15. a) Briefly discuss the operation of navigational campus, eco sounder and barometer? b) What is gyrocompass? (8+2)
- 16. a) Sketch and describe a Patent Stockless anchor?
  - b) What do you understand by term "bitter end "and "hawse pipe" in relation to anchoring process? (8+2)
- 17. a) What is the regulatory requirement for a life boat engine?
  - b) What is free fall life boat? Where it is located on board?
  - c) What is tricing pendant and bowsing tackle of a life boat?
  - d) What is embarkation ladder? When it should be used?

(4+2+2+2)