Indian Maritime University

(A Central University, Govt of India)

End Semester Examinations – December 2023

Programme Name: B Tech (ME)

Semester: I

Subject Code: UG11T4106

Subject Name: MARITIME AWARENESS

Date: 28.12.2023	Max Marks: 70
Duration: 03 Hrs	Pass Marks: 35

General Instructions

(i) All Sections (A, B & C) are to be attempted.
(ii) Options, if any, are specified in respective section.

Section A

Ten MCQs/Fill in the Blanks of 01 Mark each – Choose the correct answer as applicable.

1. Q.1 When the ship is UPRIGHT, it's _____
a) Trim is 0 meter.
b) List is 0 degree.
c) None of the above.
d) All of the above

2. What is the maximum length of a vessel's hull measured parallel to the waterline called?
A: LOA
B: Beam
C: Hull length
D: Marina berth

3. _____ Canal was first opened in 1914.
a) Panama
b) Suez
c) Kiel
d) Grand

4. _____ facilitates the loading and unloading of the cargo.
a) Harbour
b) Wharf
c) Port
d) Jetty

5. Which of the following are not related to Sounding?

A: Voyage planning
B: Cargo planning
C: Ship stability
D: Length of dry docking

6. Why is ventilation important in cargo holds?
A: For crew members' health
B: To provide fresh air into cargo holds
C: To prevent water logging
D: None of the above

7. Air pipes in tanks are generally located:

a). Near filling pipes
b). Near pump suctions
c.) At the opposite end of filling pipes and/or the highest point in the tank
d). At the lowest point in the tank

8. Choose the right term for length of ship or boat at the level where it sits on water:
A: Forward perpendicular
B: Length on waterline
C: Sheer
D: Camber

9.Why is ballasting important?

A: To adjust and distribute weight of vessel to keep ship afloat
B: To create space for cargo
C: Both of the above
D: None of the above

10.What is the left side of the ship called?

A: Port
B: Starboard
C: Stern
D: Left side

Section B

Five Questions of 02 Marks each

11. Mention the relationship between IMO and United Nations.
12. Mention five major bunker ports of the world

13. According to ship organizational structure, who takes command of ship when Master is incapacitated?

14. Name the Gulfs, Straits, and Seas in Indian Ocean.

15. What is the purpose of time zones?

Section C

Seven Questions of 10 Marks each of which any 05 questions to be answered.

16. a) What is the full form of DGS? (2 marks)

b) Name any 6 duties/ responsibilities of DGS (8 marks)

17. Which are the top ten major ports of India. Mention the types of cargo handled and the facilities of cargo handling available at each of the major ports. (10Marks)

18.a) What are gulfs? How are they different from bays? (5Marks)

Mention any five gulfs and five bays of the world with their location.

b) Which are the five busiest global major shipping routes? Which are the ports involved in these routes? What is the type of cargo that moves in these routes? (5Marks)

19.a) Sketch general cargo ship's longitudinal view. Label various parts-cargo holds, engine room, peak tanks, bottom tanks and crane. (5Marks)

b) Define following principal dimensions of the ship- Length overall, Forward perpendicular, moulded depth, moulded beam and moulded draft. (5Marks)

20.a) Sketch the plan view of tanker showing the arrangements of cargo. (5Marks)

b) Describe the importance with simple sketch about the following dimensions of the ship- Camber, Rise of floor, Flare, Sheer and Rake. (5Marks)

21. Define and briefly mention the purpose of:

A) Harbour (2 marks)
B) Berth (2 marks)
C) Ballasting (2 marks)
D) SBM (2 marks)
E) Rudder (2 marks)

22. a) Explain importance of following ship related functions or spaces- Ballasting; Double bottom; trim and list. (5Marks)

b) Make a chart for engine department of a ship and describe role and responsibilities of the persons mentioned in the chart. (5Marks)