

Indian Maritime University
(A Central University, Govt of India)

Sep/Oct'25 SE

Programme Name: B Tech (Marine Engineering)

Semester: Second

Subject Code: UG11T5205

Subject Name: Maritime Awareness

Date: 12.09.2025

Max Marks: 70

Duration: 03 Hrs

Pass Marks: 35

General Instructions

- (i) All Sections (A, B & C) are to be attempted.

Section A

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

1. What is the term for combining multiple transportation modes to move goods efficiently?
A) Logistics management
B) Multimodal transportation
C) Supply chain optimization
D) Freight forwarding
2. Which of the following is NOT a bulk cargo?
A) Iron ore
B) Grain
C) Electronics
D) Crude oil
3. Which mode of transport has the lowest environmental impact per ton-mile for bulk goods?
A) Air
B) Road
C) Sea
D) Rail
4. Refrigerated cargo typically includes all the following EXCEPT:
A) Fresh fruits
B) Dairy products
C) Coal
D) Pharmaceuticals

5. Which canal dramatically shortened shipping routes between Europe and Asia?
- A) Panama Canal
 - B) Suez Canal
 - C) Kiel Canal
 - D) Corinth Canal
6. What is the role of the International Maritime Organization (IMO)?
- A) Managing global shipping companies
 - B) Regulating maritime safety and environmental standards
 - C) Building ships
 - D) Operating ports
7. Which port is among the busiest in the world for seaborne trade?
- A) New York
 - B) Singapore
 - C) Cape Town
 - D) Mumbai
8. What sea lies between Europe and Asia, connecting to the Mediterranean via the Bosphorus Strait?
- A) Red Sea
 - B) Black Sea
 - C) Baltic Sea
 - D) North Sea
9. Which of the following is a major liquid bulk cargo?
- A) Fertilizers
 - B) Timber
 - C) Crude oil
 - D) Machinery
10. Which Indian port is the largest container port, handling over 50% of India's containerized cargo?
- A) Chennai Port
 - B) Visakhapatnam Port
 - C) Jawaharlal Nehru Port
 - D) Kandla Port

Section B

Five Questions of 02 Marks each

11. What are the merits and demerits of sea transportation compared to air transportation.
12. What are bays and gulfs? Name two important bays and gulfs of the world.
13. What is the purpose of 'sounding pipe' and 'air pipe' on board ships?
14. What is 'trim' and 'list' of a ship?

15. Describe duties and responsibilities of the engine staff.

Section C

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

16. a) Identify major parts in longitudinal section of the ship and describe the function of major parts. (5)

b) Sketch longitudinal section of ship. (5)

17. In context of Ship construction, define and explain importance of following with simple sketch,

a) Camber b) Rise of floor c) Tumblehome d) Flare e) Sheer (5X2=10)

18.a) Explain the importance of shipping for the International trade. (5)

b) Describe different factors which lead to international trade. (5)

19.a) Mention major trade routes for shipping. What are the importance of those routes? (5)

b) Explain how tides, winds and current affect sea transport? (5)

20. Describe key features of,

a) Harbour b) Berth, c) Jetty, d) Shipyard and d) Ship scrapyard (5x2=10)

21. Describe key roles and functions of following organisations related to shipping,

a) IMO b) DGS c) MMD d) Shipping Master e) FOSMA (5x2=10)

22. Describe at least five different Indian major ports for their significance because of type of cargo handled and geographical location. (10)

