



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF COMMERCE, HUMAN SCIENCE AND EDUCATION

DEPARTMENT OF MARKETING, LOGISTICS AND SPORT MANAGEMENT

QUALIFICATION: BACHELOR OF TRANSPORT MANAGEMENT	
QUALIFICATION CODE: 07BTRA	LEVEL: 7
COURSE CODE: IMT711S	COURSE NAME: INTERMODAL TRANSPORTATION
SESSION: JUNE 2024	PAPER: THEORY
DURATION: THREE (3) HOURS	MARKS: 100

SECOND OPPORTUNITY EXAMINATION PAPER	
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MODERATOR:	Ms. M POLLA

INSTRUCTIONS
1. Answer ALL the questions 2. Read all the questions carefully before answering. 3. Number the answers clearly.

THIS QUESTION PAPER CONSISTS OF 7 PAGES (Including this front page)

SECTION A: MULTIPLE CHOICE & TRUE OR FALSE QUESTIONS

QUESTION 1: Multiple Choice

[2*20 = 40 Marks]

1. Which of the following freight transportation markets has a low barrier to entry?
 - a. The private carriage business
 - b. The truck-load business
 - c. The rail industry
 - d. The pipeline industry

2. Which of the following commodities would be most likely to be shipped on a vessel?
 - a. Commodities in low-volume
 - b. High-value finished goods
 - c. Low-value and time-insensitive goods
 - d. High-value bulk goods

3. The demand for using rail-road freight transport does not depend on.
 - a. The road freight service price
 - b. The demand for coal, iron ores, and agricultural products
 - c. The pipeline's service price
 - d. The world price of crude oil

4. Which of the following is not considered an intermodal transport service characteristics?
 - a. Reliability
 - b. Transit time
 - c. Revenue
 - d. Accessibility

5. What type of Technology is being utilised to foster collaboration in the supply chain by intermodal transport carriers and shippers?
 - a. E-seal
 - b. RFID
 - c. EDI
 - d. All of the above

6. The following are intermodal transport systems, except_____?
 - a. Rail-road
 - b. Birdy back
 - c. Fishy back
 - d. Towing services

7. The following are the principal benefits of intermodal transportation except _____?
- Intermodal transportation provides more transportation option to shippers. Single modes may be too slow or too expensive for the shipper, however the combination of modes provides more options.
 - By converting from trucking to rail; IMT can reduce highway congestion
 - Many companies use containers to temporarily store goods.
 - None of the mentioned
8. Intermodal freight transportation involves the transportation of freight in a _____ or vehicle, using multiple modes of transportation (rail, ship and road), without any handling of the freight itself when changing modes.
- Container ship
 - Intermodal container
 - Well-car
 - Containerisation
9. The _____ is an example of a document of title.
- Receipt
 - Bill of lading
 - Loading manifest
 - All of the above
10. In intermodal transportation, container traffic is measured by _____
- By weight
 - By bulk
 - By ports
 - By TEUs
11. Which of the following is a renewable source of energy?
- Solar
 - Methane
 - Hydroelectric
 - All of the above
12. In response to global concerns about environmental sustainability, a logistics company is reevaluating its transportation practices. They are considering transitioning from traditional trucking to intermodal transportation. Analyse the environmental benefits of intermodal transportation. Which environmental advantage is a key consideration in the decision to adopt intermodal transportation?
- Increased fuel consumption
 - Higher carbon emissions
 - Reduced congestion
 - Limited flexibility

13. How does the container's unique identification number contribute to efficient transport management?
- It indicates the weight of the container.
 - It allows for easy tracking and verification.
 - It determines the container's contents.
 - All of the above
14. Flexibility in intermodal transportation is primarily achieved through:
- Exclusive use of a single-mode
 - Containers as versatile unit load devices
 - Relying solely on maritime transport
 - Flexibility in handling diverse cargo types
15. A shipment needs to travel a short distance of 200 kilometres. Would intermodal transportation be advantageous in this case?
- Yes, because short distances always favour intermodal transportation
 - No, because intermodal is only suitable for long distances
 - Yes, because intermodal is flexible for various distances
 - No, because intermodal is exclusively for air transport
16. High-quality infrastructure significantly impacts:
- Fuel consumption in intermodal transportation
 - Efficiency in intermodal logistics
 - Short-distance rail transportation
 - The need for standardised handling
17. How has containerisation contributed to reducing travel time for freight?
- By increasing port turnaround times
 - By minimising transshipment operations
 - By decreasing operational velocity
 - By reducing container stacking density
18. In terms of economies of scale, how has the size of container ships evolved over the years, and what impact has it had on operating costs?
- Container ships have decreased in size, reducing operating costs.
 - Larger container ships have led to higher operating costs.
 - The size of container ships has remained constant.
 - Increasing container ship size has resulted in lower operating costs.
19. The emergence of global terminal operators has changed port competition dynamics. What term is used to describe the competition between multiple terminal operators within the same port?

- a. Inter-port competition
 - b. Transshipment competition
 - c. Intra-port competition
 - d. Regionalisation competition
20. A city is planning to integrate its airport terminal with a high-speed train station. What advantage does this integration offer in terms of transportation options?
- a. Reduced rail travel options
 - b. Increased air travel market share
 - c. Better connectivity for regional accessibility
 - d. Lower passenger convenience

QUESTION 2

True or False Questions

[2*5 = 10 Marks]

- 2.1. Modern intermodal freight transportation relies on management units such as containers, swap bodies, pallets, and semi-trailers due to recent technological advancements.
- 2.2. The value of cargo is not a critical factor in deciding the appropriateness of an intermodal transport chain.
- 2.3. Containers used in intermodal transportation can only carry specific types of goods and commodities.
- 2.4. In intermodal transportation, line-haul economies of rail are most effective for short distance journeys.
- 2.5. Reduced travel times in intermodal transportation are achieved by exclusively relying on a single mode throughout the entire journey.

Sub-total: 50 Marks

SECTION B: STRUCTURED QUESTIONS

QUESTION 1

[25 Marks]

ABC Logistics, a prominent player in the intermodal transport sector in Europe, faces multifaceted challenges in ensuring safety and regulatory compliance across its diverse transportation networks. This case study explores the intricacies of ABC Logistics' operations

and its proactive approach to addressing safety concerns while adhering to stringent regulatory frameworks.

Background:

Operating across road, rail, sea, and inland waterways, ABC Logistics facilitates the seamless movement of goods for clients across various industries. In an environment governed by a multitude of national and international regulations, ABC Logistics prioritises safety alongside efficiency and reliability.

Challenges:

1. **Regulatory Compliance Complexity:** Navigating diverse regulatory frameworks set by organisations like ISO, CEN, and UIC presents a significant challenge for ABC Logistics. Harmonising operations with these standards demands meticulous attention to detail.
2. **Rail Safety Concerns:** While road transport is ABC Logistics' primary focus, aligning with stringent rail safety standards, particularly in combined transport operations, poses significant challenges. Compliance with RSSB regulations is crucial to mitigate risks in rail transport.
3. **Container and Swap Body Safety:** Adherence to international safety conventions such as the International Convention for Safe Containers and European standards for swap bodies requires meticulous attention. Ensuring the design, construction, and maintenance of freight containers and swap bodies meet rigorous safety standards is essential.
4. **Maritime Safety Imperatives:** Compliance with regulations overseen by bodies like MCA and EMSA is paramount in waterborne transport. Adhering to international conventions and EU directives and rigorous safety inspections minimises maritime transport risks.

Approach:

ABC Logistics adopts a proactive approach to address safety challenges and ensure regulatory compliance includes, including continuous training and education, collaboration with regulatory authorities, technology integration, and cultivating a safety culture.

Evaluate the strategic implications of ABC Logistics' proactive approach to safety management in the context of its intermodal transport operations. Discuss how the company's emphasis on continuous training, collaboration with regulatory authorities, technology integration, and safety culture contributes to its competitive advantage and long-term sustainability.

QUESTION 2

[25 Marks]

The transportation sector has witnessed profound changes. There has been a paradigm shift or, better yet, a mobility revolution in the past few years. Transport and mobility are both being provided and used, enabled by advances in information and communication technology (ICT), sensor technology, communication technology, and data science. Future transport and mobility trends are mostly discussed using four components: automation, connectivity, electrification, and sharing.

Using examples, elaborate on how the advent of the mentioned technologies may help reduce the environmental impact caused by intermodal modes of transportation.

Sub-total: 50 Marks
Grand Total: 100 Marks

END OF MEMORANDUM