

INTERNATIONAL DIPLOMA IN LOGISTICS AND TRANSPORT

MOVEMENT OF GOODS DIP06

JUNE 2023

Instructions to Candidates

- Duration of examination: **3 hours**
- Answer Section A Compulsory and any 3 questions from Section B
- Questions may be answered in any order.
- Allocation of marks is indicated along each question.
- Credit will be given for citing relevant examples.
- Write legibly.

SECTION A (Compulsory)

Case Study: Airspace Airlines

Airspace Airlines is a regional passenger airline operating in the southeastern United States. It operates as an independent airline between certain origin/destination pairs but also operates as a contract carrier for Delta out of the Atlanta airport. Airspace currently has a fleet of aging turboprop aircraft with an average capacity of 35 passengers. The average trip length for Airspace is 250 miles. Airspace employs only Airline Pilot Association union pilots. Jim Gray is the vice president of operations for Airspace and is faced with the challenge of minimizing the impacts of fuel and labor costs on Airspace operating profits. The operating cost per seat mile for his fleet of aircraft is approximately \$0.12. Maintenance costs are 15 percent of operating costs and are higher than the industry average. Pilot wages average \$45 per hour. Airspace about increasing the number of departures it offers out of Atlanta. Delta is also asking for a lower fare structure to help boost its profits. Jim knows that his current fleet will not be able to meet an increased demand and is pessimistic that he can lower operating costs without significantly reducing fuel costs and increasing pilot productivity. However, he is certain that the future financial viability of Airspace relies on a continued relationship with Delta.

QUESTION 1

a) Appraise the management of Airspace other ways to minimize higher operating costs.

(10 marks)

- b) Explain the constraints you can identify that would prevent Airspace from implementing your suggestions. (10 marks)
- c) How would you suggest Jim responds to Delta's requests for more flights at a lower cost. (5 marks)

SECTION B

Answer any THREE questions.

Question 1

Examine any five (5) trade-offs in transportation design. (25 marks)

Question 2

Discuss the rationale for the economic regulation of goods transportation in the Zimbabwean context.

(25 marks)

Question 3

Demonstrate your understanding on the following design options for transportation networks.

- (a) A voyage charter
- (b) Time charter
- (c) Bareboat charter
- (d) Demurrage
- (e) Contract of Affreightment

Question 4

Examine the factors which need to be considered to achieve effective routing and scheduling.

(25 marks)

(25 marks)