

1. [20 points] Define the following terms:

(1) (5%) intermodal freight transportation

(2) (5%) piggyback service

(3) (5%) birdyback service

(4) (5%) land bridge

2. [20 points] Discuss the advantages and disadvantages of using air and sea carriers. Under what conditions may sea-air intermodal service be considered?

3. [20 points] Compare and contrast the truckload (TL) segment of the motor-carrier industry with the less-than-truckload (LTL) segment in terms of infrastructure, cost structure, market structure, and operation characteristics.

4. [20 points] Assume you are the traffic manager of a manufacture company. What information would you want to know before finalizing your carrier selection decision?

5. [20 points] Describe economies of scope in terms of freight transportation. The need to move empty vehicles is a constant characteristic of any freight transportation system; empty movements generate costs but no revenues. Describe the methods available to reduce empty vehicle traffic.