Communications and Transport Systems Department of Science and Technology Linköping University

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$ext{TNFL03}$ - fallstudier inom flygtrafik och logistik

Homework Set 1, 16.01.2018

We will discuss solutions on Friday, January 19.

Problem	A	В	C	D
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TEXT 1 for reading comprehension, for questions 1-10:

Rail transportation is inexpensive (especially for long-distance movements), relatively slow and quite **unreliable**. As a result, the railroad is a slow mover of raw materials (coal, chemicals, etc.) and of low-value finished products (paper, tinned food, etc.). This is due mainly to three reasons:

- Convoys transporting freight have low priority compared to trains transporting passengers
- Direct train connections are quite rare
- A convoy must include tens of cars in order to be worth operating

Trucks are used mainly for moving semi-finished and finished products. Road transportation can be TL or LTL. (A) A TL service moves a full load directly from its origin to its destination in a single trip. (B) If shipments add up to much less than the vehicle capacity, it is more convenient to resort to several trucking services in conjunction with **consolidation** terminals rather than use direct shipments. (C)

Air transportation is often used along with road transportation in order to provide door-to-door services. While air transportation is in principle very fast, **it** is slowed down in practice by freight handling at airports. Consequently, air transportation is not competitive for short and medium haul shipments. In contrast, it is quite popular for the transportation of high-value products over long distances. (D)

Using more than one mode of transportation can lead to transportation services having a reasonable trade-off between cost and transit time. Although there are in principle several combinations of the five basic modes of transportation, in practice only a few of them turn out to be convenient. The most frequent **intermodal** services are air-truck transportation, train-truck transportation, and ship-truck transportation. Containers are the most common load units in intermodal transportation and can be moved in two ways:

- Containers are loaded on a truck and the truck is then loaded onto a train, a ship or an airplane
- Containers are loaded directly on a train, a ship or an airplane

Exercise 1 (regarding TEXT 1):

The word unreliable in paragraph 1 is closest in meaning to:

- A) unsolicited
- B) undepandable
- C) unfit
- D) unneeded

Exercise 2 (regarding TEXT 1):

All of the following are mentioned as disadvantages of rail transportation EXCEPT:

- A) passenger trains have higher priority than goods trains
- B) freight trains are cost effective only when they are composed of many cars
- C) there exist hardly any direct train connections
- D) not all shippers and consignees have rail sidings

Exercise 3 (regarding TEXT 1):

What do TL and LTL stand for?

- A) Truckload, Less-Than-Truckload
- B) Truckload, Larger-Than-Truckload
- C) Total-Load, Large-Total-Load
- D) Total-Load, Less-Than-Totalload

Exercise 4 (regarding TEXT 1):

Look at the positions (A)-(D) that indicate where this sentence can be added to the passage. Where would the sentence fit best?

As a result, LTL trucking is slower than TL trucking.

Exercise 5 (regarding TEXT 1):

The word consolidation in the second paragraph refers to:

- A) small shipments are merged into larger ones
- B) small shipments are handled by a warehouse
- C) shipments to different destinations are transported to a single destination

D) direct shipment

Exercise 6 (regarding TEXT 1):

How are air and road transportation used for door-to-door services?

- A) By organizing it such that the truck is loaded with the freight at the aircraft door.
- B) Freight is moved from origin to ultimate destination by combining the two modes.
- C) Air transportation is fast, and is combined with the slower road transportation.
- D) Air and road transportation are competitive for long-haul transport.

Exercise 7 (regarding TEXT 1):

The word it in the third paragraph refers to:

- A) door-to-door services
- B) road transportation
- C) air transportation
- D) direct shipment

Exercise 8 (regarding TEXT 1):

The word intermodal in paragraph 4 is closest in meaning to:

- A) involving transportation by more than one form of carrier during a single journey
- B) involving transportation by more than one shipper during a single journey
- C) involving transportation by more than one carrier during a single journey
- D) involving transportation by a single carrier

Exercise 9 (regarding TEXT 1):

Which of the following is NOT supported by the passage?

- A) The five basic transportation modes are combined mainly in three ways.
- B) Rail transportation is hardly used for the transport of high-value products.
- C) In intermodal transport containers are widely used.
- D) Air transportation is the fastest way to transport high-value products.

Exercise 10 (regarding TEXT 1):

According to the passage, how can containers be moved?

- A) TOFC
- B) COFC
- C) TOFC or COFC
- D) FOB or COFC

Exercise 11 (regarding TEXT 1):

Air-truck transportation is also denoted as?

- A) piggyback
- B) fishyback
- C) birdyback
- D) snakeback

Exercise 12 (regarding TEXT 1):

Train-truck transportation is also denoted as?

- A) piggyback
- B) fishyback
- C) birdyback
- D) snakeback

Exercise 13 (regarding TEXT 1):

Ship-truck transportation is also denoted as?

- A) piggyback
- B) fishyback
- C) birdyback
- D) snakeback

TEXT 2 for reading comprehension, for questions 11 -13:

The safe conduct of flight is the first priority of any air traffic service. At the same time, many pilots do not want to have to follow strict and inflexible

rules while in the air. These opposing requirements are met by dividing airspace into two basic types.

Firstly, some airspace is designed to allow safe and **expeditious** flights of passenger-carrying aircraft, linking airports and continents through a system of airways high-level routes, under the continuous surveillance and protection of an air traffic control service.

Secondly, the remaining airspace is free for any pilot to use as he or she wished (subject to certain basic rules of the air), without hindrance or interference from controllers.

This basic and simple principle is applied across UK airspace, although in order to ensure that **it** meets everyone's needs a number or intermediate stages are necessary.

Exercise 14 (regarding TEXT 2):

The word expeditious in paragraph 2 is closest in meaning to:

- A) exhibitory
- B) fast
- C) secure
- D) direct

Exercise 15 (regarding TEXT 2):

Which of the following is NOT supported by the passage:

- A) Safety is the highest priority in air traffic management.
- B) Part of the airspace is under continuous surveillance and protection of an air traffic control service.
- C) All airspace not under surveillance and protection of an air traffic control service can be used without any rules.
- D) UK airspace is basicly divided into two airspace types.

Exercise 16 (regarding TEXT 2):

The word it in the last paragraph refers to:

- A) airspace
- B) UK
- C) principle
- D) stage