# Chapter 3: International Logistics Infrastructure

TRUE/FALSE

1. Given the differences logistics managers may find in other countries and cultures, it is important for them to adapt to what is unfamiliar in those other countries and cultures.

ANS: T DIF: Easy REF: page 70

1. A country’s court system is part of its infrastructure.

ANS: T DIF: Easy REF: page 71

1. The infrastructure that most obviously affects the movement of goods internationally is the communications infrastructure.

ANS: F DIF: Moderate REF: page 71

1. As the size of ships has increased, ports have been challenged in keeping up with their ability to handle them.

ANS: T DIF: Easy REF: page 71

1. Unlike other industries, ports in the developed world have managed to avoid strong unions.

ANS: F DIF: Moderate REF: page 79

1. Because work in modern ports goes so fast, there is no need for warehousing space.

ANS: F DIF: Moderate REF: page 79

1. The productivity of a port is dependent upon the quality of the road and rail network to which it is connected.

ANS: T DIF: Easy REF : page 80

1. The current trend in shipbuilding is to build ships that will not fit through the newer locks of the Panama Canal.

ANS: T DIF: Moderate REF: page 72

1. The majority of containerships currently in use are post-Panamax ships.

ANS: F DIF: Hard REF: page 72

1. Air cargo operations are helped by the fact that there is a more than adequate supply of refrigerated warehouses at airports.

ANS: F DIF: Moderate REF: page 92

1. China spends more than $100 billion per year (between 2012 and 2020) to upgrade its railroad network.

ANS: T DIF: Moderate REF: page 93

1. For the most part, the emphasis on European railroads has been upon freight rather than passenger service.

ANS: F DIF: Moderate REF: page 93

1. The concern for the road infrastructure of a country is not one of density, but one of usability.

ANS: T DIF: Moderate REF: page 96

1. A common problem with the utilities part of the national infrastructure is the availability of electricity.

ANS: T DIF: Easy REF: page 107

1. Most of the easily accessible oil and gas fields are in the early part of their production life expectancies.

ANS: F DIF: Easy REF: page 109

1. Since the pipeline infrastructure is declining, more of the energy needs of the world must be transported by ships, trucks, and railroads.

ANS: F DIF: Moderate REF: page 109

1. The World Bank estimates that at least 75 percent of the world population has access to adequate sanitation.

ANS: F DIF: Hard REF: page 109

1. Many ports have had to dredge channels to allow ships with drafts of up to 40 feet.

ANS: T DIF: Moderate REF: page 73

1. There is a direct rail link from Southern Europe to Asia where the Orient Express connects directly with the Baghdad Railway in Istanbul.

ANS: F DIF: Hard REF: page 85

1. The *World Port Source* website provides a thorough directory of public warehouses located throughout the world.

ANS: F DIF: Hard REF: page 78

1. A crossing of the Suez Canal, which allows a ship to not have to go around the entire continent of Africa, can cost almost of half a million U.S. dollars.

ANS: T DIF: Moderate REF: page 84

1. For security reasons, some companies are switching their mail deliveries to private services like DHL or FedEx.

ANS: T DIF: Easy REF: page 103

1. Kai Tak is the name of the former airport in Hong Kong.

ANS: T DIF: Easy REF: page 91

1. In some countries, the population has, on average, more than two cell phones per person.

ANS: T DIF: Moderate REF: page 105

1. Intellectual property protection is well protected worldwide.

ANS: F DIF: Easy REF: page 111

MULTIPLE CHOICE

 1. Of the following, the best definition of a logistics infrastructure would be that it consists of

|  |  |  |  |
| --- | --- | --- | --- |
| a. | all of the elements in place to facilitate transportation, communication, and business exchanges. | d. | a developed banking system. |
| b. | a country’s electrical supply and road network. | e. | the level of development of a country |
| c. | the amount of computerization a country has. |

ANS: A

A country’s electrical supply and road network, the amount of computerization a country has, and a developed banking system are incomplete answers. Option “all of the elements in place to facilitate transportation, communication, and business exchanges” incorporates all aspects of logistics infrastructure.

DIF: Moderate REF: page 70

 2. Neo-Panamax and Post-Panamax ships have resulted in

|  |  |  |  |
| --- | --- | --- | --- |
| a. | ports being able to handle more ships. | d. | Ports needing less space to accommodate containers. |
| b. | cranes being unable to reach across post-Panamax ships. | e. | Ports needing less personnel. |
| c. | the ability to load up to thirteen containers across the width of the ship. |

ANS: B

Post-Panamax ships do not mean that ports are being able to handle more ships. Post-Panamax ships can load up to twenty containers across the width of the ship. This extra width has been a challenge for ports’ cranes to reach across them.

DIF: Hard REF: page 76

 3. Because some ports are becoming increasingly limited in their ability to handle ever-larger ships it is possible that

|  |  |  |  |
| --- | --- | --- | --- |
| a. | ship sizes will become smaller. | d. | ocean shipping costs will rapidly decline. |
| b. | massive government programs will do what is necessary to upgrade the smaller ports. | e. | companies will start shipping more by air than by ocean. |
| c. | large ships will go to “hub” ports where “feeder” ships will traverse to and from the smaller ports. |

ANS: C

Given the cost advantages of economies of scale, ship sizes will probably *not* become smaller; while ocean shipping costs may or may not decline, it will not be directly due to the obsolescence of some ports, and economically some ports cannot be successfully upgraded to handle the big ships. It is likely there will be a need to create large port hubs for large ships, while smaller ports would service “feeder” ships.

DIF: Moderate REF: page 74

 4. Among characteristics of the Saint Lawrence Seaway is/are

|  |  |  |  |
| --- | --- | --- | --- |
| a. | it is wide and most ships can pass through it. | d. | it links the Great Lakes to the Saint Lawrence River and the Atlantic Ocean. |
| b. | it is growing in the amount of traffic it carries. | e. | it is open year-round. |
| c. | it provides good year-round transportation. |

ANS: D

The Seaway is narrow and few ships can pass through its locks. It is also plagued by ice, and closes from January to March. Traffic through the Seaway is down 45 percent from what it was twenty years ago.

DIF: Moderate REF: page 84

 5. The busiest cargo airport in the world is

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Los Angeles. | d. | Dallas-Fort Worth International. |
| b. | Denver International. | e. | None of the airports listed is the largest cargo airport in the world. |
| c. | Chicago O’Hare. |

ANS: E

The busiest cargo airport in the world is Hong Kong.

DIF: Hard REF: page 91

 6. The TGV trains connecting London and Paris

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| --- | --- | --- | --- |
| a. | feature expedited container freight service. | d. | compete with airline service. |
| b. | feature package express service. | e. | take a ferry to cross the English Channel. |
| c. | provide the latest in break-bulk freight transport technology. |

ANS: D

The TGV trains connecting London and Paris provide high-speed passenger service that competes with airlines.

DIF: Hard REF: page 93

 7. Factors contributing to the rise of U.S. freight railroads since about 1980 are

|  |  |  |  |
| --- | --- | --- | --- |
| a. | road congestion, concerns about pollution and noise, and development of the multi-modal container. | d. | the building of new railroads. |
| b. | higher train speeds, development of more custom service by railroads, and concerns about terrorism. | e. | the unreliability of air freight. |
| c. | increased shipments of high-value goods like computers, unreliability of air freight, and the building of new railroads. |

ANS: A

Freight train speeds have *not* increased noticeably; most major railroads are *not* good at custom service, especially for small shippers; terrorism has *not* caused a shift of freight to rail; trains do *not* do well with high-value goods like computers; air freight *is* reliable, and there has been little new railroad construction. Railroad freight has grown due to road congestion, concerns about pollution and noise, and development of the multi-modal container.

DIF: Moderate REF: page 93

 8. Warehouse infrastructure of a country may determine

|  |  |  |  |
| --- | --- | --- | --- |
| a. | what the transport modes may charge for transportation. | d. | transportation costs. |
| b. | how goods are packaged. | e. | inventory costs. |
| c. | import duties. |

ANS: B

Warehouse infrastructure can vary by country so it is important to obtain information about the specific location so it can be determined how to correctly package the shipment.

DIF: Moderate REF: page 102

 9. In the European Union, the goal for mail delivery sent to a national address is

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| --- | --- | --- | --- |
| a. | two days. | d. | D + 2. |
| b. | three days. | e. | less than a week. |
| c. | D + 1. |

ANS: C

The goal is D + 1, or delivery on the day after the letter is mailed.

DIF: Moderate REF: page 103

 10. In countries with poor traditional telephone services, communications infrastructure has rapidly been developed through

|  |  |  |  |
| --- | --- | --- | --- |
| a. | fax machines. | d. | computers. |
| b. | satellite technology. | e. | mail. |
| c. | cellular telephones. |

ANS: C

Fax machines and computers are dependent upon good telephone services. Satellite technology is better at helping international as opposed to local telephone communications. Cellular telephones have, however, allowed the leap frogging of old telephone technology.

DIF: Moderate REF: page 104

 11. There are sometimes problems with electrical supply in

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Sub-Sahara Africa. | d. | Western Europe |
| b. | Saudi Arabia. | e. | Any part of the world. |
| c. | some parts of a developed country like the United States. |

ANS: E

All of these areas have had electrical supply problems in the last decade, including California.

DIF: Moderate REF: page 108

 12. Because some countries have poor traditional telephone services, companies and consumers have resorted to

|  |  |  |  |
| --- | --- | --- | --- |
| a. | leap frogging. | d. | fiber-optic telephones. |
| b. | express package services. | e. | voice over internet protocol (VOIP) services. |
| c. | satellite telephones. |

ANS: A

Companies and consumers have leap-frogged over old telephone technology to cellular telephone service. Express package services and fiber-optic telephones are not relevant and satellite telephones have not been successful.

DIF: Moderate REF: page 104

 13. Regarding water availability in the infrastructure

|  |  |  |  |
| --- | --- | --- | --- |
| a. | more than 95 percent of the world’s population has running water. | d. | it is less important that access to sewers. |
| b. | many cities have old leaky pipes. | e. | the quality of the water supply is more important than its availability. |
| c. | it is not important to economic development. |

ANS: B

Water is critical to economic development, indeed, to supporting life. Less than 85 percent of the world population even lives within one kilometer of clean water. However, many cities do have old leaky pipes.

DIF: Easy REF: page 108

 14. One of the first problems faced by an international logistics manager has to do with

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| --- | --- | --- | --- |
| a. | air transport availability. | d. | customs. |
| b. | weather. | e. | labor training. |
| c. | infrastructure. |

ANS: C

Air transport availability may not be relevant since not all goods are shipped by air; weather is always a concern, but not the foremost one and neither is customs. The first concern is infrastructure, as there are many challenges presented by the different levels found abroad.

DIF: Easy REF: page 70

 15. As ships move through the Panama Canal, the locks they traverse use an inordinate amount of water, because of the canal’s \_\_\_\_\_\_

|  |  |  |  |
| --- | --- | --- | --- |
| a. | access points. | d. | gates. |
| b. | location. | e. | locks. |
| c. | longitude. |

ANS: E

The correct answer is the locks of the Panama Canal.

DIF: Hard REF: page 83

 16. The only water link between the Black Sea and the oceans is

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| --- | --- | --- | --- |
| a. | the Corinth Canal. | d. | the Bosporus Strait. |
| b. | the Danube River. | e. | the Strait of Gilbraltar. |
| c. | Lake Saint Clair. |

ANS: D

The only water link within the Black Sea is the Bosporus Strait.

DIF: Moderate REF: page 85

 17. As a defense measure to keep invading military troops from using their railroads, Spain and Russia

|  |  |  |  |
| --- | --- | --- | --- |
| a. | built explosives into bridges and tunnels. | d. | made their railroad curves too tight for European railcars. |
| b. | made drive controls in locomotives opposite to what they were in the rest of Europe. | e. | made their signalization incompatible with European locomotives. |
| c. | developed widths between the rails (gauges) different from those of the rest of Europe. |

ANS: C

To prevent possible invaders from using their railroads, Spain and Russia developed railroad gauges that were incompatible with those in standard use in Europe.

DIF: Moderate REF: page 92

 18. The idea that containerized ocean cargo needs to take a shortcut across a landmass by rail has resulted in the development of

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| --- | --- | --- | --- |
| a. | TGV trains. | d. | Shinkansen trains. |
| b. | more port dredging. | e. | land canals. |
| c. | land bridges. |

ANS: C

TGV and Shinkansen trains are respectively French and Japanese passenger trains. While port dredging may be necessary to dock ships, it is not a direct issue in land bridges, which were created to shortcut across a landmass, as opposed to long, expensive, and inconvenient waterway travels.

DIF: Easy REF: page 95

 19. Although there is no equivalent term in English, the French term *ouvrages d’art* has to do with

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| --- | --- | --- | --- |
| a. | civil engineering structures. | d. | telecommunications. |
| b. | art museums. | e. | any work of art. |
| c. | art galleries. |

ANS: A

*Ouvrages d’art*—or art structures—is a term used for civil engineering structures built and designed to eliminate the constraints of the landscape.

DIF: Easy REF: page 99

 20. Given common worldwide infrastructure problems, many international travelers say people going abroad

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| --- | --- | --- | --- |
| a. | should not use cell phones. | d. | should avoid using local taxis. |
| b. | should avoid drinking local water. | e. | should not use dollars. |
| c. | should not use express package services like FedEx. |

ANS: B

Due to infrastructure issues, the quality of water is a concern. There are no reasons to restrict phone usage or express package services, for any reason.

DIF: Easy REF: page 109

COMPLETION

 1. Ports have been challenged in handling ships with drafts exceeding \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ feet.

ANS: 40

DIF: Hard REF: page 73

 2. For shippers handling non-containerized cargo, the capacity of a port’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a major factor in deciding which port through which to send a specific cargo.

ANS: cranes

DIF: Hard REF: page 76

 3. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of an airport determine(s) the type of aircraft which can serve that airport.

ANS: runways

DIF: Moderate REF: page 89

 4. Since most airports are geographically close to large cities, their hours of operations are generally limited by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ constraints.

ANS: noise

DIF: Moderate REF: page 92

 5. In the United States, paved roads represent \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ percent of the road infrastructure.

ANS: 65

DIF: Moderate REF: page 96

 6. The government of Poland estimates that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ percent of its roads are in bad condition.

ANS: 80

DIF: Hard REF: page 96

 7. In many countries, access to high-speed highways is limited to those who can pay a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

ANS: toll

DIF: Easy REF: page 99

 8. The tunnel between France and Great Britain is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

ANS: Chunnel

DIF: Easy REF: page 99

 9. Protection of goods when they have to wait at one or more points in transit have to do with a port or country’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ infrastructure.

ANS: warehousing

DIF: Moderate REF: page 102

 10. In addition to problems of production, many electrical utilities around the world are victims of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of power and, in Russia, of electrical wires.

ANS: theft

DIF: Easy REF: page 108