Chapter 1: Global Supply Chains: The Role and Importance of Transportation

**MULTIPLE CHOICE**

1. Transportation has been described as:

 a. The glue that holds the supply chain together

 b. The enabler of the underlying tactics and strategies for supply chains

 c. An enabler for firms to compete in the growing and complex market place

 d. All of the above

ANS: D PTS: 1 DIF: Medium REF: Page 5

1. Which of the following countries have the largest export trade flows:

 a. China

 b. U.S.

 c. Germany

 d. Japan

ANS: A PTS: 1 DIF: Easy REF: Page 6

1. The top 30 countries account for about what percentage of the world’s exports:

 a. 25%

 b. 50%

 c. 80%

 d. 90%

ANS: C PTS: 1 DIF: Medium REF: Page 7

1. The volume of global trade over the course of the last 50 years has:

 a. Remained almost constant

 b. Doubled

 c. Tripled

 d. Decreased

ANS: B PTS: 1 DIF: Easy REF: Page 7

1. There was spectacular growth in global trends after 1990. Why?

 a. Greater acceptance of foreign produced manufactured products.

 b. Elimination of trade agreements

 c. Higher tariffs

 d. All of the above

ANS: A PTS: 1 DIF: Medium REF: Page 7

1. The top importer in the world is:

 a. China

 b. Germany

 c. Japan

 d. U.S.

ANS: D PTS: 1 DIF: Easy REF: Page 9

1. Which of the following countries had the largest population in 2014?

 a. U.S.

 b. China

 c. India

 d. Indonesia

ANS:B PTS: 1 DIF: Easy REF: Page 13

1. Which of the following countries is expected to have the largest population in 2050?

 a. U.S.

 b. China

 c. India

 d. Indonesia

ANS: C PTS: 1 DIF: Easy REF: Page 13

1. In 2010, what was the approximate percentage of people in the United States who were 65 or older?

 a. 15%

 b. 10%

 c. 5%

 d. 20%

ANS: A PTS: 1 DIF: Hard REF: Page 16

1. In 2030, what is the estimated percentage of the world’s population that will live in urban areas?

 a. 30%

 b. 40%

 c. 50%

 d. 60%

ANS: D PTS: 1 DIF: Hard REF: Page 16

1. What area of the world will have the largest number of megacities by 2015?

 a. United States

 b. South America

 c. Africa

 d. Asia

ANS: D PTS: 1 DIF: Medium REF: Page 16

1. What positive outcomes have occurred in the global economy with increase interdependence:

 a. Lower prices

 b. Wider availability of goods

 c. New employment opportunities

 d. All of the above

ANS: D PTS: 1 DIF: Medium REF: Page 19

1. On the micro level, global interdependence has:

 a. Increased competition

 b. Decreased the level of complexity

 c. Reduced outsourcing

 d. Increased product lifecycles

ANS: A PTS: 1 DIF: Hard REF: Page 19

1. When did the supply chain management concept capture the attention of senior level executives in many organizations:

 a. 1960’s

 b. 1980’s

 c. 1990’s

 d. 2000’s

ANS: B PTS: 1 DIF: Easy REF: Page 19

1. Reverse logistics systems are developed for:

 a. Returning unacceptable products

 b. Returning rail box cars

 c. Eliminating empty back hauls

 d. Receiving payment from customers

ANS: A PTS: 1 DIF: Easy REF: Page 23

1. Forward information in the supply chain is utilized to provide:

 a. Advanced shipment notices

 b. Order status

 c. Inventory availability

 d. All of the above

ANS: D PTS: 1 DIF: Medium REF: Page 25

1. Cash flow is important to organizations producing products for sale because it:

 a. Reduces the need for working capital

 b. Eliminates the need for checks to pay vendors

 c. Provides bonus money for employees

 d. None of the above

ANS: A PTS: 1 DIF: Medium REF: Page 25-26

1. Which one of the following is not one of the major flows in a supply chain?

 a. Information

 b. Water

 c. Financials/ cash

 d. Products

ANS: B PTS: 1 DIF: Easy REF: Page 23

1. One effective method to reduce the bullwhip effect in a supply chain is to replace inventory with:

 a. Information

 b. Outsourcing

 c. TOFC service

 d. Transportation

ANS: A PTS: 1 DIF: Medium REF: Page 25

1. Which of the following is consistent with a green supply chain strategy?

 a. Reduce packaging materials

 b. Ship small loads, more frequently

 c. Use motor carriers instead of railroads

 d. Shift to a group of suppliers located at a more distant location

ANS: A PTS: 1 DIF: Easy REF: Page 24

**SHORT ANSWER**

1. What is a “graying population?”

ANS:

A term that some economists and demographers use to describe a country with an increasing number of citizens who are older the median age of the world population.

PTS: 1 DIF: Easy REF: Page 14

2. What is a megacity?

ANS:

A relatively new term to describe cities with populations over 10 million.

PTS: 1 DIF: Medium REF: Page 16

3. What are the two important dimensions of technology?

ANS:

Technology can be viewed as internal agent of change for organizations and also an external change agent.

PTS: 1 DIF: Hard REF: Page 17

4. Why was the development of the internet such an important external change agent?

ANS:

It made information available in real time to large segments of the population via their personal computers and other devices.

PTS: 1 DIF: Medium REF: Page17

5. Describe “3D” printing.

ANS:

Also called additive manufacturing which will allow corporations and other organizations to duplicate or make a physical copy of an object similar to what happens with 2-D copy machines.

PTS: 1 DIF: Medium REF: Page 18

**ESSAY**

1. What factors have accounted for growth in the volume of global trade?

ANS:

A number of factors came into play including economic growth, trade agreements, lower tariffs and a greater acceptance of importing finished products that were manufactured in other countries as opposed to only importing raw materials

PTS: 1 DIF: Medium REF: Page 5

2. Differentiate between absolute and comparative advantage.

ANS:

While both concepts provide a rationale for trade between regions or countries, there is a difference. Absolute advantage postulates the trade is beneficial when the two regions or countries each have an advantage in producing one of two products in terms of cost. Absolute advantage recommends that they each produce the one product where they have the advantage and then trade which will be mutually beneficial. Whereas comparative advantage postulates that even if one country or region has a low cost advantage for both products, trade can be beneficial if the low cost country has a comparative advantage in one of the products

PTS: 1 DIF: Hard REF: Page 11

3. What other demographics in addition to the size of a country’s population are important for economic growth?

ANS:

In addition to size, education levels and skills are important indicators of labor efficiency. The age distribution of the country’s population is also important. A younger population usually means a larger labor pool and more potential for families and market demand. The general health of citizens and average life span are of interest.

PTS: 1 DIF: Medium REF: Page 13

4. What is a megacity and why are they important for the future?

ANS:

The term megacity is relatively new and used to describe urban areas with populations over ten million. They represent a worldwide trend of populations migrating to urban areas. In developing nations, they will present major challenges to develop the infrastructure, transportation, and utilities to adequately support the population.

5. Why was information technology so impactful for businesses and other organizations?

ANS:

Information technology has been a major factor for increasing competition, changing business models and the obsolescence of some business. It has expedited outsourcing strategies and provided an opportunity for businesses, large or small, to participate in supply chains over a wider geographic area. Information has afforded opportunity and also disruption and the end is not insight.

PTS: 1 DIF: Medium REF: Page 17

6. What impact has robotics had on supply chains?

ANS:

The skills of humans combined with the precision and efficiency of robots has led to improved productivity in distribution centers where the robots store, retrieve and pack goods for distribution. More is yet to come!

7. Why has P&G decided to jettison about half of their brands?

ANS:

Like many large consumer product companies, P&G added new brands/products to increase gross sales, but over time in the more competitive global environment, the large number of brands become a disadvantage and about half of the brands produced “marginal” sales. They also lost some of their flexibility and responsiveness to respond to changes in the marketplace to remain competitive.

PTS: 1 DIF: Hard REF: Page 20

8. Explain the three major flows in a supply chain.

ANS:

They are: product flow, information flow, and financial/cash flow. Product flow is a traditional area of importantance for logistics to acquire, make and distribute finished products in an efficiently and timely manner. You can think of it as the supply chain engine. Information flow is the fuel of the supply chain powering materials and products through the chain from beginning to end. The financial cash flow is the payback for accomplishing the objectives of the supply chain efficiently and effectively.

PTS: 1 DIF: Hard REF: Page 23

9. What is the bullwhip effect and why is it important?

ANS:

When there is uncertainty about demand and long intervals between information flows, inventory builds up in the supply chain to prevent stock outs. The further back in the supply chain an organization is from the market, the greater the uncertainty usually the higher the level of safety stock.

PTS: 1 DIF: Hard REF: Page 25

10. Describe the three phases of development for supply chain concept.

ANS:

The three phases are: physical distribution, business logistics, and supply chain management. Physical distribution was developed during the 1960s with a focus on the outbound side of a producer. In other words, after a product was produced until it reached the customer with a focus upon minimizing the total cost of that phase. Business logistics added the inbound side with a continued focus upon lowest total cost. The third phase was supply chain management which focused on the extended enterprises and the three major flows—products, information and cash.

PTS: 1 DIF: Hard REF: Page 20-21