**Chapter 1 Introduction to Operations and Supply Chain Management**

**TRUE/FALSE**

1. Every organization has an operations function.

**Answer:** True

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** organization, operations, function

1. Most organizations function as part of a larger supply chain.

**Answer:** True

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** organization, supply, chain, supply chain

1. The supply chain is a network of manufacturers and service providers that work together to convert and move goods from the raw materials stage to the end user.

**Answer:** True

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** organization, supply, chain, network

1. To participate in a supply chain, a firm must actually handle the physical goods at some point.

**Answer:** False

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** decision, supply, chain, operations

1. Information and materials are two examples of inputs to the transformation process.

**Answer:** True

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** information, materials, input, transformation

**AACSB:** Communication

1. In general, operations management activities are information and decision intensive.

**Answer:** True

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** information, decision, operations, management

1. Of the three flows linking organizations in a supply chain, information and monetary flows always move upstream and physical flows always move downstream.

**Answer:** False

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** information, monetary, information, flows, supply, chain

**AACSB:** Communication

1. A second tier supplier is downstream from a first tier supplier in the supply chain.

**Answer:** False

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** downstream, supply, chain, tier

1. Most of the participants in a supply chain are both suppliers and customers.

**Answer:** True

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** supply, chain, supplier, customer

1. Electronic commerce refers to the use of information technology solutions to automate business transactions.

**Answer:** True

**Reference:** Important Trends

**Difficulty:** Easy

**Keywords:** electronic, commerce, e-commerce, information, technology

**AACSB:** Use of Information Technology

1. The drive for efficiency has decreased the level of globalization in the world economy over the last twenty years.

**Answer:** False

**Reference:** Important Trends

**Difficulty:** Moderate

**Keywords:** globalization

1. E-commerce is the component of a supply chain that is the most susceptible to breakdown.

**Answer:** False

**Reference:** Important Trends

**Difficulty:** Moderate

**Keywords:** e-commerce, electronic, commerce, supply, chain

**AACSB:** Use of Information Technology

1. To avoid supply chain problems, firms must manage relationships with their *downstream* suppliers as well as their *upstream* customers.

**Answer:** False

**Reference:** Important Trends

**Difficulty:** Moderate

**Keywords:** customer, relationship, management, downstream, upstream

1. The educational society for resource management is called APICS.

**Answer:** True

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Moderate

**Keywords:** resource, management, APICS, society

1. . Transportation and warehousing are examples of logistics activities.

**Answer:** True

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Moderate

**Keywords:** logistics, transportation, warehousing

1. There is no need for an organizational interface between the finance function and the operations and supply chain management function.

**Answer:** False

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Moderate

**Keywords:** interface, marketing, operations

**MULTIPLE CHOICE**

1. The collection of people, technology, and systems within an organization that has primary responsibility for providing the organization’s products or services is called:
   1. the supply chain.
   2. the operations function.
   3. the evoked set.
   4. relationship management.

**Answer:** b

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** operations, function

1. Which of the following is NOT a flow typically found in a supply chain?
   1. physical
   2. information
   3. monetary
   4. risk

**Answer:** d

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** supply, chain, flow

**AACSB:** Communication

1. Which of the following is primarily a supply chain management decision?
   1. from whom to purchase materials
   2. how many of each item should be produced
   3. the mix of labor skill and automation
   4. plant location

**Answer:** a

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Difficult

**Keywords:** supply, chain, decision, supplier

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is an example of an output of the transformation process.
   1. Material
   2. Information
   3. Satisfied customers
   4. Intangible needs

**Answer:** c

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Difficult

**Keywords:** output, transformation, process, customer

1. Which of the following statements about the operations function is NOT correct?
   1. Inputs to operations can take many different forms.
   2. Nearly all operations activities require coordination with other business functions.
   3. The outputs of an operations function are always tangible.
   4. Operations management activities are information intensive.

**Answer:** c

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** operations, function, tangible, output

1. Which of the following statements regarding the supply chain is TRUE?
   1. A second tier supplier is downstream from a first tier supplier.
   2. A first tier supplier is upstream from a second tier supplier.
   3. A first tier supplier is downstream from a second tier supplier.
   4. A customer is upstream from a first tier supplier.

**Answer:** c

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** downstream, upstream, tier, supplier, customer

1. Which of the following lists is in correct supply chain order?
   1. first tier supplier – manufacturer – distributor
   2. distributor – manufacturer – retailer
   3. first tier supplier – second tier supplier – third tier supplier
   4. customer – retailer – distributor

**Answer:** a

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** downstream, tier, supplier, distributor

1. Which of these statements about recent trends in operations and supply chain management is best?
   1. A lower level of competition exists thanks to an increased level of globalization.
   2. The rate of change in markets is actually lower than 10-15 years ago once inflation is factored in..
   3. Managers tend to make decisions with less information than they used to.
   4. Customers demand increased standardization in goods and services..

**Answer:** c

**Reference:** Important Trends

**Difficulty:** Moderate

**Keywords:** information, management, trends

1. An electronic commerce system:
   1. is used to transmit information only upstream.
   2. can improve the speed and quality of business communication.
   3. is used to transmit information only downstream.
   4. links everyone in the supply chain except customers.

**Answer:** b

**Reference:** Important Trends

**Difficulty:** Moderate

**Keywords:** e-commerce, business, communications

**AACSB:** Use of Information Technology, Communication

1. Which of the following is NOT a trend in operations management?
   1. increased use of electronic commerce
   2. increased globalization
   3. decreased delivery times
   4. decreased customization

**Answer:** d

**Reference:** Important Trends

**Difficulty:** Moderate

**Keywords:** trend, operations, management, customization

1. Efforts to improve cooperation among firms in the supply chain can be characterized as:
   1. globalization.
   2. domestic focus.
   3. relationship management.
   4. electronic commerce.

**Answer:** c

**Reference:** Important Trends

**Difficulty:** Moderate

**Keywords:** relationship, management, supply, chain

1. The organization that provides national and institutional leadership in purchasing and materials management is:
   1. APICS
   2. ISM
   3. CLM
   4. ASQ

**Answer:** b

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Difficult

**Keywords:** supply, management, purchasing

1. Which job title would most likely be responsible for supervising production in a manufacturing setting?
   1. supply chain manager
   2. production manager
   3. supplier development manager
   4. purchasing manager

**Answer:** b

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Easy

**Keywords:** operations, production, manufacturing, manager

1. Which department is least likely to interact with the purchasing function?
   1. engineering
   2. finance
   3. human resources
   4. operations

**Answer:** c

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Difficult

**Keywords:** operations, purchasing, finance, engineering

**FILL IN THE BLANK**

1. The collection of people, technology, and systems within an organization that has primary responsibility for providing the organization’s products or services is \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** operations

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** operations, product, service

1. Most organizations function as part of larger \_\_\_\_\_\_\_\_\_\_\_\_\_\_ that are linked through physical, monetary, and information flows.

**Answer:** supply chains

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** supply chain

1. Operations can be considered a transformation process that takes things like materials, labor, and capital, called \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and transforms them into goods or services, called \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** inputs, outputs

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** operations, transformation, input, output

1. An activity or firm that is positioned earlier in the supply chain relative to another activity or firm is said to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** upstream

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** upstream, supply chain

1. Printing and binding a book take place \_\_\_\_\_\_\_\_\_\_\_\_\_\_ from the conversion of wood to paper pulp in a publishing supply chain.

**Answer:** downstream

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** downstream, supply chain

1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_ model is used to define relationships in supply chain management.

**Answer:** SCOR

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** SCOR, supply chain

1. A second tier supplier is located \_\_\_\_\_\_\_\_\_\_\_\_\_\_ from a first tier supplier.

**Answer:** upstream

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** upstream, supply chain

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the use of information technology solutions to automate business transactions.

**Answer:** Electronic commerce

**Reference:** Why Important Trends

**Difficulty:** Easy

**Keywords:** electronic, commerce, e-commerce, information

**AACSB:** Use of Information Technology

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the term that describes efforts to improve operations by increasing supply chain members’ willingness to cooperate.

**Answer:** Relationship management

**Reference:** Why Important Trends

**Difficulty:** Moderate

**Keywords:** relationship, relationship management, supply chain

1. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_ acquires knowledge in a specific market in which the organization purchases significant quantities of materials and services.

**Answer:** commodity manager

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Difficult

**Keywords:** commodity manager, commodity

1. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_ supervises production in a manufacturing setting.

**Answer:** production manager

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Easy

**Keywords:** production manager, production

1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a leader in education and all aspects of quality improvement.

**Answer:** ASQ or American Society for Quality

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Moderate

**Keywords:** American society, quality, ASQ

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is an operations activity with the purpose of designing and implementing the transformation processes that best meet the needs of the customer and firm.

**Answer:** Process selection

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Difficult

**Keywords:** process, selection, transformation, design

1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_ function of an organization manages the movement of physical goods throughout the supply chain.

**Answer:** logistics

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Moderate

**Keywords:** logistics, supply chain

**ESSAY**

1. What are three reasons that the study of operations and supply chain management is important?

**Answer:** One reason that the study of operations management is important is that every organization must make a product or provide a service that someone values. Without this, there is no reason for the existence of the organization. The study of supply chain management is important because most organizations function as part of a larger supply chain. Finally, organizations must carefully manage their operations and supply chains in order to prosper. The better the supply chain and operations functions are coordinated, the greater chance for success of all members.

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Easy

**Keywords:** organization, operations, supply chain

1. Describe the operations function’s transformation process and provide an example for each element.

**Answer:** The transformation process view of operations management holds that inputs are transformed into outputs. Examples of inputs are raw materials, labor, capital, equipment, information, and intangible needs. The transformation process is the conversion of these inputs using either manufacturing or service operations (and sometimes both). Manufacturing operations might be painting, welding, machining, or assembling. Outputs of the transformation process are tangible goods, fulfilled needs, and satisfied customers. Specific examples may vary depending on the company chosen.

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** transformation, operations, input, output

1. Distinguish between upstream and downstream firms in a supply chain and provide an example.

**Answer:** Upstream and downstream are relative terms that describe the position of a supply chain member from one point of reference. A supply chain member that is upstream from a firm is sending their output to the firm for use as an input. A supply chain member that is downstream from a firm is taking the firm’s output and using it as an input to their own processes. It is possible for a single member of a supply chain to be both upstream and downstream from one or more members of their supply chain.

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** upstream, downstream, supply chain, input, output

1. Distinguish between first tier and second tier suppliers in a supply chain and provide an example.

**Answer:** First tier, second tier, and any subsequent steps are measured relative to their position from a common point in the supply chain. All companies at a level (call it A) receive inputs from their first tier suppliers (level B). These first tier suppliers (at level B) in turn receive their inputs from their own first tier suppliers (level C). These companies (level C) are considered second tier suppliers of the companies at level A. Both tiers are upstream from level A, but level B is downstream from level C. Examples will vary.

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** first tier, second tier, upstream, downstream, supply chain, input, output

1. Supply chains have been in existence for over a century. What is different about supply chains in the 21st century from those in existence 100 years ago?

**Answer:** The active management of supply chain activities is the big difference between supply chains in existence today and those of decades ago. Active management includes relationship management and an examination of the supply chain as a whole to optimize it from a global perspective. In the past, the production managers of each company in the supply chain were more concerned with the operation and financial well being of his own company, often to the detriment of other members of the supply chain.

**Reference:** Why Study Operations and Supply Chain Management?

**Difficulty:** Moderate

**Keywords:** supply chain, management

**AACSB:** Reflective Thinking

1. Briefly discuss the three important trends in business that have focused attention on operations and supply chain management.

**Answer:** The three trends are electronic commerce, increasing competition and globalization, and relationship management. Electronic commerce is the use of information technology solutions to automate business transactions. E-commerce promises to improve the speed, quality, and cost of business communications and can be used to coordinate a supply chain. The rate of change in markets, products, and technology is escalating, resulting in increased competition. It is no longer good enough to be the best producer within a city, region, or country; firms must be able to compete on a global scale. Finally, we recognize that very few firms are not in a supply chain. As a firm strives to improve to meet this global competition, it may require the cooperation of other members of its supply chain. This cooperation is by no means a certainty, so relationship management is essential to facilitate supply chain coordination.

**Reference:** Important Trends

**Difficulty:** Moderate

**Keywords:** e-commerce, global, relationship, supply chain

**AACSB:** Use of Information Technology

1. Choose any two non-operations business functions. Provide examples of an operations or supply chain activity that interfaces directly with each business function you have chosen.

**Answer:** Examples will vary. The marketing function interfaces with operations and supply chain management during process selection, forecasting, capacity planning, planning and control, purchasing, and logistics. The finance function works closely with operations and supply chain management in process selection, forecasting, capacity planning, inventory management, and purchasing. The human resource function works directly with operations and supply chain management when making process selection, capacity planning decisions. The accounting function works with operations and supply chain management when capacity planning is being performed. The IT function is involved with operations and supply chain management while process selection, inventory management, and planning and control are taking place.

**Reference:** Operations and Supply Chain Management and You

**Difficulty:** Difficult

**Keywords:** e-commerce, global, relationship, supply chain

**AACSB:** Reflective Thinking