Operations Management, 12e (Heizer/Render/Munson)
Chapter 1 Operations and Productivity

Section 1 What is Operations Management?

1) Some of the operations-related activities of Hard Rock Café include designing meals and analyzing them for ingredient cost and labor requirements.
Answer: TRUE
Diff: 1
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

2) Because Hard Rock Cafés are themed restaurants, operations managers focus their layout design efforts on attractiveness while paying little attention to efficiency.
Answer: FALSE
Diff: 1
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

3) All organizations, including service firms such as banks and hospitals, have a production function.
Answer: TRUE
Diff: 2
Key Term: Production
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

4) Operations management is the set of activities that creates value in the form of goods and services by transforming inputs into outputs.
Answer: TRUE
Diff: 1
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

5) An example of a "hidden" production function is the transfer of funds between accounts at a bank.
Answer: TRUE
Diff: 2
Key Term: Production
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

6) At Hard Rock Café, tasks that reflect operations or operations management include:
A) designing efficient layouts.
B) providing meals.
C) receiving ingredients.
D) preparing effective employee schedules.
E) all of the above.
Answer: E
Diff: 1
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

7) An operations task performed at Hard Rock Café is:
A) borrowing funds to build a new restaurant.
B) advertising changes in the restaurant menu.
C) calculating restaurant profit and loss.
D) preparing employee schedules.
E) all of the above.
Answer: D
Diff: 2
Key Term: Operations management
AACSB: Reflective thinking
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

8) Operations management is applicable:
A) mostly to the service sector.
B) to services exclusively.
C) mostly to the manufacturing sector.
D) to all firms, whether manufacturing or service.
E) to the manufacturing sector exclusively.
Answer: D
Diff: 2
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

9) _____ is the set of activities that creates value in the form of goods and services by transforming inputs into outputs.
Answer: Operations management
Diff: 1
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

10) Identify three or more operations-related tasks carried out by Hard Rock Café.
Answer: Providing custom meals; designing, testing, and costing meals; acquiring, receiving, and storing supplies; recruiting and training employees; preparing employee schedules; designing efficient restaurant layouts.
Diff: 1
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

11) Define operations management. Will your definition accommodate both manufacturing and service operations?
Answer: Operations management can be defined as the management of all activities directly related to the creation of goods and/or services through the transformation of inputs into outputs. Yes.
Diff: 1
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

Section 2 Organizing to Produce Goods and Services

1) Which of the following are the primary functions of all organizations?
A) production/operations, marketing, and human resources
B) marketing, human resources, and finance/accounting
C) sales, quality control, and production/operations
D) marketing, production/operations, and finance/accounting
E) research and development, finance/accounting, and purchasing
Answer: D
Diff: 2
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

2) Which of the following pioneers was NOT making a professional impact during the Scientific Management Era?
A) Frank Gilbreth
B) W. Edwards Deming
C) Henry L. Gantt
D) Lillian Gilbreth
E) Frederick W. Taylor
Answer: B
Diff: 2
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

3) Which of the following would NOT be an operations function in a commercial bank?
A) auditing
B) teller scheduling
C) maintenance
D) collection
E) check clearing
Answer: A
Diff: 2
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

4) The marketing function is concerned with:
A) producing goods or providing services.
B) procuring materials, supplies, and equipment.
C) building and maintaining a positive image.
D) generating the demand for the organization's products or services.
E) securing monetary resources.
Answer: D
Diff: 2

5) The purchasing function is concerned with:
A) producing goods or providing services.
B) procuring materials, supplies, and equipment.
C) building and maintaining a positive image.
D) generating the demand for the organization's products or services.
E) securing monetary resources.
Answer: B
Diff: 2

6) The finance function is concerned with:
A) producing goods or providing services.
B) procuring materials, supplies, and equipment.
C) building and maintaining a positive image.
D) generating the demand for the organization's products or services.
E) securing monetary resources.
Answer: E
Diff: 2

7) Which of the following tasks within an airline company are related to operations?
A) crew scheduling
B) international monetary exchange
C) sales
D) advertising
E) accounts payable
Answer: A
Diff: 2
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

8) Marketing, production/operations, and _____ are the three functions that all organizations must perform to create goods and services.
Answer: finance/accounting
Diff: 1

Section 3 The Supply Chain

1) Competition in the 21st century is no longer between companies; it is between *supply chains*.
Answer: TRUE
Diff: 2
Key Term: Supply chain

2) An accounting firm that provides tax services for a company would be considered to be part of that company's supply chain.
Answer: TRUE
Diff: 2
Key Term: Production
AACSB: Reflective thinking
Learning Outcome: Compare and contrast different sourcing strategies including outsourcing and insourcing

3) What is a global network of organizations and activities that supply a firm with goods and services?
A) supply tree
B) provider network
C) supply chain
D) vendor network
E) vendor tree
Answer: C
Diff: 1
Key Term: Supply chain
Learning Outcome: Compare and contrast different sourcing strategies including outsourcing and insourcing

4) Which of the following fosters specialization and worldwide supply chains?
A) more expensive transportation
B) instant communication
C) economies of scope
D) managers with a broad knowledge of many things
E) high trade tariffs
Answer: B
Diff: 2
Key Term: Supply chain
Learning Outcome: Compare and contrast different sourcing strategies including outsourcing and insourcing

5) A(n) _____ is a global network of organizations and activities that supply a firm with goods and services.
Answer: supply chain
Diff: 1
Key Term: Supply chain
Learning Outcome: Compare and contrast different sourcing strategies including outsourcing and insourcing

6) Competition in the 21st century is no longer between companies; it is between _____.
Answer: supply chains
Diff: 2
Key Term: Supply chain
Learning Outcome: Compare and contrast different sourcing strategies including outsourcing and insourcing

7) Identify up to four phenomena that foster specialization and worldwide supply chains.
Answer: (1) a more technologically oriented society, (2) specialized expert knowledge, (3) instant communication, and (4) cheaper transportation
Diff: 2
Key Term: Supply chain
Learning Outcome: Compare and contrast different sourcing strategies including outsourcing and insourcing

Section 4 Why Study OM?

1) One reason to study operations management is to learn how people organize themselves for productive enterprise.
Answer: TRUE
Diff: 1
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

2) Reasons to study operations management include:
A) studying how people organize themselves for productive enterprise.
B) knowing how goods and services are consumed.
C) understanding what human resource managers do.
D) learning about a costly part of the enterprise.
E) A and D
Answer: E
Diff: 2
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

3) Reasons to study operations management include learning about:
A) how people organize themselves for productive enterprise.
B) how goods and services are produced.
C) what operations managers do.
D) a costly part of the enterprise.
E) all of the above.
Answer: E
Diff: 1
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

4) Brandon Production is a small firm focused on the assembly and sale of custom computers. The firm is facing stiff competition from low-priced alternatives, and is looking at various solutions to remain competitive and profitable. Current financials for the firm are shown in the table below. In the first option, marketing will increase sales by 50%. The next option is Vendor (Supplier) changes, which would result in a decrease of 10% in the cost of inputs. Finally, there is an OM option, which would reduce production costs by 25%. Which of the options would you recommend to the firm if it can only pursue one option? In addition, comment on the feasibility of each option.

Business Function	Current Value
Cost of Inputs	$50,000
Production Costs	$25,000
Revenue	$80,000

Answer: Marketing would increase sales to $120,000 ($80,000 ∗ 1.5) but increase cost of inputs and production costs to $112,500 (($50,000 + $25,000) ∗ 1.5). This would net an additional $2500 of profit ($120,000 - $112,500 - current profit of $5000). Vendor (Supplier) Changes would decrease cost of inputs to $45,000 ($50,000 ∗ .9), resulting in $5,000 of additional profit (savings) ($50,000 - $45,000). Finally, the OM option would save $6250 ($25,000 - $25,000 ∗ .75), resulting in an additional $6250 of profit. Thus the OM option is the most profitable. Comments on feasibility should center on the near impossibility of increasing revenue by 50%, while noting the other two options are difficult but not impossible.
Diff: 2
AACSB: Analytical thinking
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

Section 5 What Operations Managers Do

1) The operations manager performs the management activities of planning, organizing, staffing, leading, and controlling of the OM function.
Answer: TRUE
Diff: 2
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

2) "Considers inventory ordering and holding decisions" is within the strategic operations management decision area of *managing quality*.
Answer: FALSE
Diff: 1
Key Term: 10 strategic OM decisions
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

3) In order to have a career in operations management, one must have a degree in statistics or quantitative methods.
Answer: FALSE
Diff: 1
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

4) What are the five elements in the management process?
A) plan, direct, update, lead, and supervise
B) accounting, finance, marketing, operations, and management
C) organize, plan, control, staff, and manage
D) plan, organize, staff, lead, and control
E) plan, lead, organize, manage, and control
Answer: D
Diff: 2
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

5) Which of the following is NOT an element of the management process?
A) controlling
B) leading
C) planning
D) pricing
E) staffing
Answer: D
Diff: 2

6) An operations manager is NOT likely to be involved in:
A) the design of goods and services to satisfy customers' wants and needs.
B) the quality of goods and services to satisfy customers' wants and needs.
C) the identification of customers' wants and needs.
D) work scheduling to meet the due dates promised to customers.
E) maintenance schedules.
Answer: C
Diff: 1
Key Term: 10 strategic OM decisions
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

7) All of the following decisions fall within the scope of operations management EXCEPT for:
A) creating the company income statement.
B) design of goods and services.
C) location strategy.
D) managing quality.
E) human resources and job design.
Answer: A
Diff: 1
Key Term: 10 strategic OM decisions
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

8) The 10 strategic operations management decisions include:
A) layout strategy.
B) maintenance.
C) process and capacity design.
D) managing quality.
E) all of the above.
Answer: E
Diff: 1
Key Term: 10 strategic OM decisions
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

9) Which of the following is NOT one of the 10 strategic operations management decisions?
A) layout strategy
B) maintenance
C) process and capacity design
D) mass customization
E) supply chain management
Answer: D
Diff: 2
Key Term: 10 strategic OM decisions
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

10) Which of the following is one of the 10 strategic operations management decisions?
A) depreciation policy for tax returns
B) advertising
C) process and capacity design
D) pricing
E) debt/equity ratio
Answer: C
Diff: 1
Key Term: 10 strategic OM decisions
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

11) Which of the following are among the 10 strategic operations management decisions?
I. design of goods and services
II. managing quality
III. layout strategy
IV. marketing
V. pricing of goods and services
A) I, II, V
B) I, II, IV
C) II, III, V
D) I, II, III
E) I, II, III, IV, V
Answer: D
Diff: 2
Key Term: 10 strategic OM decisions
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

12) Which of the following influences layout design?
A) inventory requirements
B) capacity needs
C) personnel levels
D) technology
E) All of the above influence layout decisions.
Answer: E
Diff: 2

13) Which of the following is NOT a strategic operations management decision?
A) maintenance
B) price
C) layout design
D) quality
E) inventory
Answer: B
Diff: 2
Key Term: 10 strategic OM decisions
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

14) Identify two operations-related tasks carried out by Hard Rock Café. Match each to its related area of the 10 strategic operations management decisions.
Answer: Providing custom meals: design of goods and services; designing, testing, and costing meals: design of goods and services; acquiring, receiving, and storing supplies: supply chain management; recruiting and training employees: human resources and job design; preparing employee schedules: scheduling; designing efficient restaurant layouts: layout strategy.
Diff: 2
Key Term: 10 strategic OM decisions
AACSB: Reflective thinking
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

15) Identify the 10 strategic OM decisions.
Answer: Design of goods and services, managing quality, process strategy, location strategies, layout strategies, human resources, supply chain management, inventory management, scheduling, and maintenance.
Diff: 3
Key Term: 10 strategic OM decisions
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

Section 6 The Heritage of Operations Management

1) Henry Ford is known as the Father of Scientific Management.
Answer: FALSE
Diff: 1

2) Shewhart's contributions to operations management came during the Scientific Management Era.
Answer: FALSE
Diff: 2

3) Walter Shewhart is listed among the important people of operations management because of his contributions to:
A) assembly line production.
B) measuring productivity in the service sector.
C) just-in-time inventory methods.
D) statistical quality control.
E) information technology.
Answer: D
Diff: 2
Key Term: Operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

4) Walter Shewhart, in the _____, provided the foundations for _____ in operations management.
A) 1920s; statistical sampling
B) United Kingdom; mass production
C) U.S. Army; logistics
D) nineteenth century; interchangeable parts
E) 1900s; queuing theory
Answer: A
Diff: 2
Key Term: Operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

5) Eli Whitney, in the _____, provided the foundations for _____ in operations management.
A) 1920s; statistical sampling
B) United Kingdom; mass production
C) U.S. Army; logistics
D) nineteenth century; interchangeable parts
E) 1890s; queuing theory
Answer: D
Diff: 2
Key Term: Operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

6) Who was the person most responsible for popularizing interchangeable parts in manufacturing?
A) Frederick Winslow Taylor
B) Henry Ford
C) Eli Whitney
D) Whitney Houston
E) Lillian Gilbreth
Answer: C
Diff: 2
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

7) The "Father of Scientific Management" is:
A) Henry Ford.
B) Frederick W. Taylor.
C) W. Edwards Deming.
D) Frank Gilbreth.
E) just a figure of speech, not a reference to a person.
Answer: B
Diff: 2
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

8) Henry Ford is noted for his contributions to:
A) material requirements planning.
B) statistical quality control.
C) assembly line operations.
D) scientific management.
E) time and motion studies.
Answer: C
Diff: 1
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

9) Who among the following is associated with contributions to quality control in operations management?
A) Charles Babbage
B) Henry Ford
C) Frank Gilbreth
D) W. Edwards Deming
E) Henri Fayol
Answer: D
Diff: 2
Key Term: Operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

10) The field of operations management is shaped by advances in which of the following fields?
A) chemistry and physics
B) industrial engineering and management science
C) biology and anatomy
D) information technology
E) all of the above
Answer: E
Diff: 2
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

11) Which of the following statements is TRUE?
A) The person most responsible for initiating the use of interchangeable parts in manufacturing was Eli Whitney.
B) The origins of management by exception are generally credited to Frederick W. Taylor.
C) The person most responsible for initiating the use of interchangeable parts in manufacturing was Walter Shewhart.
D) The origins of the scientific management movement are generally credited to Henry Ford.
E) The person most responsible for initiating the use of interchangeable parts in manufacturing was Henry Ford.
Answer: A
Diff: 2
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

12) Henry Ford and _____ are credited with the development of the moving assembly line.
Answer: Charles Sorensen
Diff: 2
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

13) Identify the items that Fredrick W. Taylor believed management should be more responsible for.
Answer: He believed that management should be more responsible for matching employees to the right job, providing the proper training, providing proper work methods and tools, and establishing legitimate incentives for work to be accomplished.
Diff: 2
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

14) Operations managers should be well versed in what disciplines in order to make good decisions?
Answer: Management science, information technology, and often one of the biological or physical sciences.
Diff: 2
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

Section 7 Operations for Goods and Services

1) Customer interaction is often high for manufacturing processes, but low for services.
Answer: FALSE
Diff: 2
Key Term: Services
Objective: LO 1.2 Explain the distinction between goods and services

2) Manufacturing now constitutes the largest economic sector in postindustrial societies.
Answer: FALSE
Diff: 2
Key Term: Services
Objective: LO 1.2 Explain the distinction between goods and services

3) Although the *number* of people employed in manufacturing in the United States has decreased since 1950, each person is now producing almost 20 times more than in 1950.
Answer: TRUE
Diff: 1
Objective: LO 1.2 Explain the distinction between goods and services

4) Which of the following is the best example of a pure service?
A) counseling
B) oil change
C) heart transplant
D) electric Co-Op
E) restaurant
Answer: A
Diff: 2
Key Term: Services
Objective: LO 1.2 Explain the distinction between goods and services

5) The service sector makes up approximately what percentage of all jobs in the United States?
A) 12%
B) 40%
C) 66%
D) 85%
E) 94%
Answer: D
Diff: 2
Key Term: Service sector
Objective: LO 1.2 Explain the distinction between goods and services

6) Which is NOT true regarding differences between goods and services?
A) Tangible goods are generally produced and consumed simultaneously; services are not.
B) Most goods are common to many customers; services are often unique to the final customer.
C) Services tend to have a more inconsistent product definition than goods.
D) Services tend to have higher customer interaction than goods.
E) None, i.e., all of the above are true.
Answer: A
Diff: 2
Key Term: Services
Objective: LO 1.2 Explain the distinction between goods and services

7) Which is NOT true regarding differences between goods and services?
A) Services are generally produced and consumed simultaneously; tangible goods are not.
B) Services tend to be more knowledge-based than goods.
C) Services tend to have a more inconsistent product definition than goods.
D) Goods tend to have higher customer interaction than services.
E) Reselling is unusual in services; goods often have some residual value.
Answer: D
Diff: 2
Key Term: Services
Objective: LO 1.2 Explain the distinction between goods and services

8) Which of the following services is LEAST likely to be unique, i.e., customized to a particular individual's needs?
A) dental care
B) hairdressing
C) legal services
D) elementary education
E) computer consulting
Answer: D
Diff: 2
Key Term: Services
AACSB: Reflective thinking
Objective: LO 1.2 Explain the distinction between goods and services

9) Which of the following is NOT a typical service attribute?
A) intangible product
B) easy to store
C) customer interaction is high
D) simultaneous production and consumption
E) difficult to resell
Answer: B
Diff: 2
Key Term: Services
Objective: LO 1.2 Explain the distinction between goods and services

10) Which of the following attributes is most typical of a service?
A) production and consumption occur simultaneously
B) tangible
C) mass production
D) consistency
E) easy to automate
Answer: A
Diff: 2
Key Term: Services
Objective: LO 1.2 Explain the distinction between goods and services

11) Which of the following is a similarity between goods and services?
A) mass production
B) consistency
C) automation
D) Both have quality standards.
E) Both can usually be kept in inventory.
Answer: D
Diff: 2
Key Term: Services
Objective: LO 1.2 Explain the distinction between goods and services

12) When a tangible component is not included in a service, such as with counseling, it is called a(n) _____.
Answer: pure service
Diff: 1
Key Term: Services
Objective: LO 1.2 Explain the distinction between goods and services

13) How do services differ from goods? Identify five ways.
Answer: Pick from the following: a service is usually intangible; it is often produced and consumed simultaneously; it is often unique; it involves high customer interaction; product definition is inconsistent; it is often knowledge-based; it is frequently dispersed; quality may be hard to evaluate; and reselling is unusual.
Diff: 2
Key Term: Services
Objective: LO 1.2 Explain the distinction between goods and services

Section 8 The Productivity Challenge

1) Productivity is generally more difficult to improve in the service sector than in the manufacturing sector.
Answer: TRUE
Diff: 2
Key Term: Productivity
Objective: LO 1.6 Identify the critical variables in enhancing productivity
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

2) A knowledge society is one that has migrated from work based on knowledge to one based on manual work.
Answer: FALSE
Diff: 1
Key Term: Knowledge society
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

3) Productivity is the total value of all inputs to the transformation process divided by the total value of the outputs produced.
Answer: FALSE
Diff: 1
Key Term: Productivity

4) Illiteracy and poor diets have been known to cost countries up to what percent of their productivity?
A) 2%
B) 5%
C) 10%
D) 20%
E) 50%
Answer: D
Diff: 2
Key Term: Productivity
AACSB: Diverse and multicultural work environments

5) A foundry produces circular utility access hatches (manhole covers). If 120 covers are produced in a 10-hour shift, the productivity of the line is:
A) 1.2 covers/hr.
B) 2 covers/hr.
C) 12 covers/hr.
D) 1200 covers/hr.
E) 120 covers/hr.
Answer: C
Diff: 1
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

6) A foundry produces circular utility access hatches (manhole covers). Currently, 120 covers are produced in a 10-hour shift. If labor productivity can be increased by 20%, it would then be:
A) 14.4 covers/hr.
B) 24 covers/hr.
C) 240 covers/hr.
D) 1200 covers/hr.
E) 10 covers/hr.
Answer: A
Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

7) Gibson Valves produces cast bronze valves on an assembly line. If 1600 valves are produced in an 8-hour shift, the productivity of the line is:
A) 2 valves/hr.
B) 40 valves/hr.
C) 80 valves/hr.
D) 200 valves/hr.
E) 1600 valves/hr.
Answer: D
Diff: 1
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

8) Gibson Valves produces cast bronze valves on an assembly line, currently producing 1600 valves each 8-hour shift. If the productivity is increased by 10%, it would then be:
A) 180 valves/hr.
B) 200 valves/hr.
C) 220 valves/hr.
D) 880 valves/hr.
E) 1760 valves/hr.
Answer: C
Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

9) Gibson Valves produces cast bronze valves on an assembly line, currently producing 1600 valves per shift. If the production is increased to 2000 valves per shift, labor productivity will increase by:
A) 10%.
B) 20%.
C) 25%.
D) 40%.
E) 50%.
Answer: C
Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

10) The Dulac Box plant produces 500 cypress packing boxes in two 10-hour shifts. What is the productivity of the plant?
A) 25 boxes/hr.
B) 50 boxes/hr.
C) 5000 boxes/hr.
D) 0.04 boxes/hr.
E) 250 boxes/hr.
Answer: A
Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

11) The Dulac Box plant works two 8-hour shifts each day. In the past, 500 cypress packing boxes were produced by the end of each day. The use of new technology has enabled them to increase productivity by 30%. Productivity is now approximately:
A) 32.5 boxes/hr.
B) 40.6 boxes/hr.
C) 62.5 boxes/hr.
D) 81.25 boxes/hr.
E) 300 boxes/hr.
Answer: B
Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

12) The Dulac Box plant produces 500 cypress packing boxes in two 10-hour shifts. Due to higher demand, they have decided to operate three 8-hour shifts instead. They are now able to produce 600 boxes per day. What has happened to productivity?
A) It has not changed.
B) It has increased by 37.5 boxes/hr.
C) It has increased by 20%.
D) It has decreased by 8.3%.
E) It has decreased by 9.1%.
Answer: A
Diff: 2
Key Term: Production
AACSB: Analytical thinking
Objective: LO 1.3 Explain the difference between production and productivity

13) Productivity measurement is complicated by:
A) the competition's output.
B) the fact that precise units of measure are often unavailable.
C) stable quality.
D) the workforce size.
E) the type of equipment used.
Answer: B
Diff: 2
Key Term: Productivity

14) The total of all outputs produced by the transformation process divided by the total of the inputs is:
A) utilization.
B) greater in manufacturing than in services.
C) defined only for manufacturing firms.
D) multifactor productivity.
E) single-factor productivity.
Answer: D
Diff: 2
Key Term: Multifactor productivity
Objective: LO 1.5 Compute multifactor productivity

15) Which productivity variable has the greatest potential to increase productivity?
A) labor
B) globalization
C) management
D) capital
E) energy
Answer: C
Diff: 2
Key Term: Productivity variables
Objective: LO 1.6 Identify the critical variables in enhancing productivity

16) Which of the following nets the largest productivity improvement?
A) increase output 15%
B) decrease input 15%
C) increase both output and input by 5%
D) increase output 10%, decrease input 3%
E) decrease input 10%, increase output 3%
Answer: B
Diff: 3
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

17) Productivity can be improved by:
A) increasing inputs while holding outputs steady.
B) decreasing outputs while holding inputs steady.
C) increasing inputs and outputs in the same proportion.
D) decreasing inputs while holding outputs steady.
E) none of the above.
Answer: D
Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

18) The largest contributor to productivity increases is _____, estimated to be responsible for _____ of the annual increase.
A) management; over one-half
B) Mr. Deming; one-half
C) marketing and sales; two-thirds
D) capital; 90%
E) technology; over one-half
Answer: A
Diff: 2
Key Term: Productivity variables
Objective: LO 1.6 Identify the critical variables in enhancing productivity

19) The factor responsible for the largest portion of productivity increase in the United States is:
A) labor.
B) management.
C) capital.
D) All three combined; it is impossible to determine the contribution of individual factors.
E) none of these.
Answer: B
Diff: 2
Key Term: Productivity variables
Objective: LO 1.6 Identify the critical variables in enhancing productivity

20) Which of the following is NOT true when explaining why productivity tends to be lower in the service sector than in the manufacturing sector?
A) Services are typically labor-intensive.
B) Services are often difficult to evaluate for quality.
C) Services are often an intellectual task performed by professionals.
D) Services are difficult to automate.
E) Service operations are typically capital intensive.
Answer: E
Diff: 2
Key Term: Productivity
Objective: LO 1.2 Explain the distinction between goods and services

21) Three commonly used productivity variables are:
A) quality, external elements, and precise units of measure.
B) labor, capital, and management.
C) technology, raw materials, and labor.
D) education, diet, and social overhead.
E) quality, efficiency, and low cost.
Answer: B
Diff: 2
Key Term: Productivity variables
Objective: LO 1.6 Identify the critical variables in enhancing productivity

22) The service sector has lower productivity improvements than the manufacturing sector because:
A) the service sector uses less skilled labor than manufacturing.
B) the quality of output is lower in services than manufacturing.
C) services usually are labor-intensive.
D) service sector productivity is hard to measure.
E) the service sector is often easy to mechanize and automate.
Answer: C
Diff: 2
Key Term: Service sector
Objective: LO 1.2 Explain the distinction between goods and services

23) Productivity tends to be more difficult to improve in the service sector because the work is:
A) often difficult to automate.
B) typically labor-intensive.
C) frequently processed individually.
D) often an intellectual task performed by professionals.
E) All of the above make service productivity more difficult.
Answer: E
Diff: 2
Key Term: Service sector
Objective: LO 1.2 Explain the distinction between goods and services

24) A small metal shop operates 10 hours each day, producing 100 parts/hour. If productivity were increased 20%, how many hours would the plant have to work to produce 1000 parts?
A) less than 2 hours
B) between 9 and 10 hours
C) between 2 and 6 hours
D) between 6 and 8 hours
E) between 8 and 9 hours
Answer: E
Diff: 3
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

25) A cleaning company uses 10 lbs each of chemicals A, B and C for each house it cleans. After some quality complaints, the company has decided to increase its use of chemical A by an additional 10 lbs for each house. By what % has productivity (houses per pound of chemical) fallen?
A) 0%
B) 10%
C) 15%
D) 25%
E) 33%
Answer: D
Diff: 3
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

26) A cleaning company uses $10 of chemicals, $40 of labor, and $5 of misc. expenses for each house it cleans. After some quality complaints, the company has decided to increase its use of chemicals by 50%. By what percentage has multifactor productivity fallen?
A) 0%
B) 8.3%
C) 25%
D) 50%
E) 16.7%
Answer: B
Diff: 3
Key Term: Multifactor productivity
AACSB: Analytical thinking
Objective: LO 1.5 Compute multifactor productivity

27) Starbucks stopped requiring signatures on credit-card purchases under $25 in an attempt to reduce _____.
Answer: transaction time (or service time)
Diff: 1
Key Term: Productivity
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

28) _____ is the total of all outputs produced by the transformation process divided by the total of the inputs.
Answer: Multifactor productivity
Diff: 1
Key Term: Multifactor productivity
Objective: LO 1.5 Compute multifactor productivity

29) Productivity is the ratio of _____ to _____. Using this relationship, productivity can be improved by _____ or _____.
Answer: outputs; inputs; reducing inputs while holding outputs constant; increasing outputs while holding inputs constant.
Diff: 2
Key Term: Productivity
Objective: LO 1.4 Compute single-factor productivity

30) Identify the three productivity variables used in the text.
Answer: The three common variables are labor, capital, and management.
Diff: 2
Key Term: Productivity variables
Objective: LO 1.6 Identify the critical variables in enhancing productivity

31) What is a knowledge society?
Answer: A knowledge society is one in which much of the labor force has migrated from manual work to work based on knowledge.
Diff: 2
Key Term: Knowledge society
Objective: LO 1.6 Identify the critical variables in enhancing productivity

32) As the administrative manager in a law office, you have been asked to develop a system for evaluating the productivity of the 15 lawyers in the office. What difficulties are you going to have in doing this, and how are you going to overcome them?
Answer: Productivity measures for a law office are difficult. Simple criteria, like number of cases processed, fail to consider complexity of the case. Even counting wins is difficult, as many cases are settled with some sort of compromise. External elements such as the quality of the opposing counsel and the tenacity of the opposition also make counting look rather silly.

Categories of cases can help (i.e., uncontested divorce, no personal injury auto case, etc.). However, many firms end up counting hours billed. This in turn leads to other problems, as noted by the number of false billing cases.
Diff: 3
Key Term: Productivity
AACSB: Reflective thinking

33) Susan has a part-time business producing seasonal plywood yard ornaments for resale at local craft fairs and bazaars. She currently works 8 hours per day to produce 16 ornaments.
a. What is her productivity?
b. She thinks that by redesigning the ornaments and switching from use of a wood glue to a hot-glue gun she can increase her total production to 20 ornaments per day. What is her new productivity?
c. What is her percentage increase in productivity?
Answer:
a. 16 ornaments/8 hours = 2 ornaments/hour
b. 20 ornaments/8 hours = 2.5 ornaments/hour
c. Change in productivity = 0.5 ornaments/hour; percent change = 0.5/2 = 25%
Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

34) A firm cleans chemical tank cars in the Bay St. Louis area. With standard equipment, the firm typically cleaned 70 chemical tank cars per month. They utilized 10 gallons of solvent, and two employees worked 20 days per month, 8 hours a day. The company decided to switch to a larger cleaning machine. Last April, they cleaned 60 tank cars in only 15 days. They utilized 12 gallons of solvent, and the two employees worked 6 hours a day.
(a) What was their raw material and their labor productivity with the standard equipment?
(b) What is their raw material and their labor productivity with the larger machine?
(c) What is the change in each productivity measure?
Answer:

Resource	(a) Standard Equipment	(b) Larger Machine	(c) Percent Change
Solvent	$\frac{70}{10} = 7$	$\frac{60}{12} = 5$	$\frac{5 - 7}{7} = -28.57\%$
Labor	$\frac{70}{320} = 0.22$	$\frac{60}{180} = .33$	$\frac{.33 - .22}{.22} = 50\%$

Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

35) The Dulac Box plant produces wooden packing boxes to be used in the local seafood industry. Current operations allow the company to make 500 boxes per day, in two 8-hour shifts (250 boxes per shift). The company has introduced some small changes in equipment, and conducted appropriate job training, so that production levels have risen to 300 boxes per shift. These changes did not require any change in the amount of capital spending or energy use. What is the firm's new labor productivity?
Answer: 600 boxes per day / 16 hours = 37.5 boxes per hour
Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

36) Mark's Ceramics spent $4000 on a new kiln last year in the belief that it would cut annual energy usage 25% over the old kiln. This kiln is an oven that turns "greenware" into finished pottery. Mark is concerned that the new kiln requires extra labor hours for its operation. Mark wants to check the energy savings of the new oven, and also to look over other measures of their productivity to see if the change really was beneficial. Mark has the following data to work with:

	Last Year	This Year
Production (finished units)	4000	4000
Greenware (pounds)	5000	5000
Labor (hrs)	350	375
Capital ($)	15000	19000
Energy (kWh)	3000	2600

Were the modifications beneficial?
Answer: The energy modifications did not generate the expected energy savings; also, labor and capital productivity decreased.

Resource	Last Year	This Year	Change	Pct. Change
Labor	4000 / 350 = 11.43	4000 / 375 = 10.67	-0.76	-6.65%
Capital	4000 / 15000 = 0.27	4000 / 19000 = .21	-0.060	-22.22%
Energy	4000 / 3000 = 1.33	4000 / 2600 = 1.54	0.21	15.79%

Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

37) Martin Manufacturing has implemented several programs to improve its productivity. They have asked you to evaluate the firm's productivity by comparing this year's performance with last year's. The following data are available:

	Last Year	This Year
Output	10,500 units	12,100 units
Labor Hours	12,000	13,200
Utilities	$7,600	$8,250
Capital	$83,000	$88,000

Has Martin Manufacturing improved its productivity during the past year?
Answer: Productivity improved in all three categories this year; utilities showed the greatest increase, and labor the least.

Resource	Last Year	This Year	Change	Pct. Change
Labor	10500 / 12000 = 0.88	12100 / 13200 = 0.92	0.04	4.55%
Utilities	10500 / 83000 = 0.13	12100 / 88000 = 0.14	0.01	7.69%
Capital	10500 / 7600 = 1.38	12100 / 8250 = 1.47	0.09	6.52%

Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

38) Felicien grows mirlitons (that's Cajun for Chayote squash) in his 100 by 100-foot garden. He then sells the crop at the local farmers' market. Two summers ago, he was able to produce and sell 1200 pounds of mirlitons. Last summer, he tried a new fertilizer that promised a 50% increase in yield. He harvested 1900 pounds. Did the fertilizer live up to its promise?
Answer: Since the productivity gain was 58.3%, not 50%, the fertilizer was at least as good as advertised.

Two Summers ago	Last Summer	Change
1200 ÷ 10,000 = .12 1bs/sq. ft	1900 ÷ 10,000 = .19 lbs/sq. ft	(.19 - .12) ÷ .12 = 58.3%

Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

39) The Dulac Box plant produces wooden packing boxes to be used in the local seafood industry. Current operations allow the company to make 500 boxes per day, in two 8-hour shifts (250 boxes per shift). The company has introduced some moderate changes in equipment, and conducted appropriate job training, so that production levels have risen to 300 boxes per shift. Labor costs average $10 per hour for each of the 5 full-time workers on each shift. Capital costs were previously $3,000 per day, and rose to $3,200 per day with the equipment modifications. Energy costs were unchanged by the modifications, at $400 per day. What is the firm's multifactor productivity before and after the changes?
Answer:
MFP before: 500 boxes / ($10 × 5 × 16 + $3000 + $400) = 500 / 4200 = 0.119 boxes/dollar
MFP after: 600 boxes / ($10 × 5 × 16 + $3200 + $400) = 600 / 4400 = 0.136 boxes/dollar
Diff: 2
Key Term: Multifactor productivity
AACSB: Analytical thinking
Objective: LO 1.5 Compute multifactor productivity

40) Gibson Products produces cast bronze valves for use in offshore oil platforms. Currently, Gibson produces 1600 valves per day. The 20 workers at Gibson work from 7 a.m. until 4 p.m., with 30 minutes off for lunch and a 15-minute break during the morning work session and another at the afternoon work session. Gibson is in a competitive industry, and needs to increase productivity to stay competitive. They feel that a 20 percent increase is needed.

Gibson's management believes that the 20 percent increase will not be possible without a change in working conditions, so they change work hours. The new schedule calls on workers to work from 7:30 a.m. until 4:30 p.m., during which workers can take one hour off at any time of their choosing. Obviously, the number of paid hours is the same as before, but production increases, perhaps because workers are given a bit more control over their workday. After this change, valve production increased to 1800 units per day.

a. Calculate labor productivity for the initial situation
b. Calculate labor productivity for the hypothetical 20 percent increase
c. What is the productivity after the change in work rules?
d. Write a short paragraph analyzing these results.

Answer:
(a) Workers are active for eight hours per day; labor productivity is 10 valves/hour
(b) If Productivity rises by 20 percent, to 12 valves/hour; output would be 12 × 8 × 20 = 1920
(c) New productivity is 1800 / (20 × 8) = 11.25 valves/hour
(d) Gibson did not gain the desired 20 percent increase in productivity, but they did gain over 11 percent, without extra equipment or energy, and without increasing the labor cost.
Diff: 3
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

41) A local university is considering changes to its class structure in an effort to increase professor productivity. The old schedule had each professor teaching 5 classes per week, with each class meeting an hour per day on Monday, Wednesday, and Friday. Each class contained 20 students. The new schedule has each professor teaching only 3 classes, but each class meets daily (Mon.-Fri.) for an hour. New classes contain 50 students.

a. Calculate the labor productivity for the initial situation (students/hour).
b. Calculate the labor productivity for the schedule change (students/hour).
c. Are there any ethical considerations that should be accounted for?
d. Suppose that each teacher also is required to have 2 hours of Office Hours each day he/she taught class. Is the schedule change a productivity increase?

Answer:

(a) Professors teach 100 students in 15 hours or 6.67 students/hour.
(b) Professors teach 150 students in 15 hours or 10 students/hour.
(c) Responses should focus on honoring stakeholder commitment and can include students per professor ratio, class sizes, quality of education, etc.
(d) Initial productivity is 100 students in 21 hours or 4.76 students/hour. New productivity is 150 students in 25 hours or 6 students/hour, an increase or 1.24 students/hour.

Diff: 3
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

42) A grocery chain is considering the installation of a set of 4 self-checkout lanes. The new self-checkout lane setup will replace 2 old cashier lanes that were staffed by a cashier and bagger on each lane. One cashier mans all 4 self-checkouts (answering questions, checking for un-scanned items, taking coupons, etc). Checkout on the new lanes takes 2 minutes (customers bag their own orders) while checkout with the old lanes took only 45 seconds. In addition, the electricity costs for both setups are $0.05 per checkout while bagging (material) costs are $0.10 per checkout with the old system and $0.15 for the new system. The new lanes also require $100/shift in capital costs. Assume that the lanes are always in use for 8 hours per day (1 shift) and that a worker makes $10/hour.

(a) How many checkouts did the old system provide in a shift?
(b) How many checkouts does the new system provide?
(c) What is the multifactor productivity for each system?

Answer:

(a) (2 lanes)(8 hours)(3600 seconds/hour)(1 checkout/45 seconds) = 1280 checkouts
(b) (4 lanes)(8 hours)(60 minutes/hour)(1 checkout/2 min) = 960 checkouts
(c) Cost for the old system = (4 workers)(8 hours)($10/hour) + ($0.10)(1280) + ($0.05)(1280) = $512. Cost for the new system = (1 worker)(8 hours)($10/hour) + ($0.15)(960) + ($0.05)(960) + $100 = $372. Multifactor productivity for old system = 1280 checkouts / $512 = 2.5 checkouts/$. Multifactor productivity for new system = 960 checkouts / $372 = 2.6 checkouts/$.

Diff: 3
Key Term: Multifactor productivity
AACSB: Analytical thinking
Objective: LO 1.5 Compute multifactor productivity

43) A swimming pool company has 100,000 labor hours available per summer and with a labor productivity of 5 pools per 6,000 hours.
a. How many pools can the company install this summer?
b. Suppose the multifactor productivity was one pool per $25,000. How much should the company expect to spend this summer constructing the pools?
Answer:
(a) 100,000 hours ∗ 5 pools/6000 hours = 83.33 or 83 pools
(b) 83 pools ∗ $25,000/pool = $2,075,000
Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

44) An industrial plant needs to make 100,000 parts per month to meet demand. Each month contains 20 working days, each of which allows for 3 separate 8 hour shifts.
(a) If a worker can produce 10 parts/hour, how many workers are needed on each shift?
(b) If each shift has 100 workers, what is the productivity of an individual worker?
(c) If material costs are $10/part, capital costs are $100,000 and labor costs are $10/hour, what is the multifactor productivity of the plant from part (a)?
Answer:
(a) 100,000 parts × (1 hour / 10 parts) × (1 shift / 8 hours) × (1 worker/60 shifts) = 20.83 = 21 workers
(b) 100,000 parts / [(60 shifts/worker) × (100 workers) × (8 hours/shift)] = 2.08 parts/hour
(c) 100,000 parts / [($10/part) × (100,000 parts) + $100,000 + (21 workers) × (60 shifts/worker) × (8 hours/shift) × ($10/hour)] = .083 parts/$1
Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.5 Compute multifactor productivity

45) The local fast food store experienced the following number of customers on the night shift:

Hour	Customers
12 AM	23
1 AM	20
2 AM	15
3 AM	5
4 AM	2
5 AM	1

If the store was staffed by two workers, what was the average productivity per worker, in customers/hour?
Answer: (23 + 20 + 15 + 5 + 2 + 1) customers/ (2 workers ∗ 6 hours/worker) = 5.5 customers/hour
Diff: 2
Key Term: Productivity
AACSB: Analytical thinking
Objective: LO 1.4 Compute single-factor productivity

Section 9 Current Challenges in Operations Management

1) Current challenges in operations management include all of the following EXCEPT:
A) just-in-time performance.
B) rapid product development.
C) mass customization.
D) empowered employees.
E) None of the above are exceptions, i.e., all are current challenges.
Answer: E
Diff: 2
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

2) Which of the following statements about challenges in operations management is FALSE?
A) Job specialization is giving way to empowered employees.
B) Local or national focus is giving way to global focus.
C) Sustainable production is giving way to a low-cost focus.
D) Rapid product development is partly the result of shorter product cycles.
E) The goal of mass customization is to produce customized products, whenever and wherever needed.
Answer: C
Diff: 2
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

3) _____ is the ability of the organization to be flexible enough to cater to the individual whims of consumers.
Answer: Mass customization
Diff: 2
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

4) _____ is the operations management challenge that moves more decision making to the individual worker.
Answer: Empowered employees
Diff: 2
Key Term: Operations management
Objective: LO 1.1 Define operations management
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

5) Why are organizations changing from batch (large) shipments to just-in-time (JIT) shipments?
Answer: Organizations are switching to JIT shipments because inventory requires a large financial investment, and it impedes the responsiveness to changes in the marketplace.
Diff: 2
Learning Outcome: Discuss operations and operations management as a competitive advantage for the organization

6) Why are organizations becoming more global?
Answer: Organizations are becoming more global with the decline in the costs of communication and transportation. Additionally, resources in the form of capital, materials, talent, and labor are also now global.
Diff: 2
Learning Outcome: Discuss the influences of the global competitive environment on operations management

Section 10 Ethics, Social Responsibility, and Sustainability

1) Ethical and social dilemmas arise because stakeholders of a business have conflicting perspectives.
Answer: TRUE
Diff: 1
Key Term: Stakeholders
AACSB: Ethical understanding and reasoning
Learning Outcome: Discuss the role of operations management in corporate social responsibility and sustainability

2) Which of the following is NOT among the ethical and social challenges facing operations managers?
A) honoring stakeholder commitments
B) training, retaining, and motivating employees
C) efficiently developing and producing safe high-quality green products
D) increasing executive pay
E) providing a safe workplace
Answer: D
Diff: 1
AACSB: Ethical understanding and reasoning
Learning Outcome: Discuss the role of operations management in corporate social responsibility and sustainability

3) A business's stakeholders, whose conflicting perspectives cause ethical and social dilemmas, include:
A) lenders.
B) suppliers.
C) owners.
D) employees.
E) all of the above.
Answer: E
Diff: 1
Key Term: Stakeholders
AACSB: Ethical understanding and reasoning
Learning Outcome: Discuss the role of operations management in corporate social responsibility and sustainability

4) What term is given to those individuals with a vested interest in an organization, including customers, distributors, suppliers, owners, lenders, employees, and community members?
A) alumni
B) investors
C) vestors
D) stockholders
E) stakeholders
Answer: E
Diff: 1
Key Term: Stakeholders
AACSB: Ethical understanding and reasoning
Learning Outcome: Discuss the role of operations management in corporate social responsibility and sustainability

5) Why are operations managers faced with ethical and social challenges?
Answer: Businesses have diverse stakeholders, which include customers, distributors, suppliers, owners, lenders, employees, and the community. These stakeholders hold *conflicting perspectives*.
Diff: 2
Key Term: Stakeholders
AACSB: Ethical understanding and reasoning
Learning Outcome: Discuss the role of operations management in corporate social responsibility and sustainability

6) What are some of the ethical and social challenges faced by operations managers?
Answer: Managers are challenged to develop and produce safe, high-quality green products; train, retain, and motivate employees in a safe workplace; and honor stakeholder commitments.
Diff: 2
AACSB: Ethical understanding and reasoning
Learning Outcome: Discuss the role of operations management in corporate social responsibility and sustainability