# Chapter 1 The Operations Function

#### **Multiple Choice Questions**

1. Why is operations management a more encompassing term than production management?

A. Operations management is concerned with multiple products and services

B. Operations management refers to service as well as manufacturing organizations

C. Operations management is broader including the financing and marketing functions

D. Operations management makes use of the tools of quantitative analysis and computer systems

2. Which of the following functions is responsible for the actual movement of goods and/or services across organizations?

A. Logistics

**B.** Operations

- C. Purchasing
- D. None of these

3. Approximately, what percentage of the American workforce works in service industries?

- A. 20%
- B. 40%
- C. 80%
- D. 90%

4. The four decision areas in operations management are:

A. Planning, technology, inventory, and control

- B. Process, quality, capacity, and inventory
- C. Process, quality, technology, and capacity
- D. None of these

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- 5. A productive systems approach:
- A. Views operations as a separate organizational function
- B. Must provide feedback information for control of process inputs and technology
- C. Is of limited use in service organizations
- D. Disregards human and social concerns
- 6. Capacity decisions:
- A. Include staffing and scheduling
- B. Include inventory control
- C. Include defining product specifications
- D. None of these
- 7. Inventory decisions involve:
- A. Determining what to order, how much to order, and when to order
- B. Tracking the flow of materials
- C. Managing the finished goods inventories
- D. All of these
- 8. The contemporary operations themes signify that:
- A. More emphasis should be placed on manufacturing than on service industries
- B. Every operation should be externally directed to meet the customers' requirements
- C. Operations decisions should precede decisions in other functions in an organization
- D. To be competitive, strategies for operations should exclude broader supply chain issues

9. The essence of operations management can be described by:

- A. Process, capacity, and people
- B. Decisions, function, and process
- C. Planning, control, and organization
- D. Integrated planning and control

- 10. Which of the following is not a contemporary theme in operations?
- A. Globalization of Operations
- B. Lean Operations
- C. Quality Teams
- D. Environmental Concerns and Sustainability
- 11. The three primary functions that exist in most business organizations are:
- A. Operations, accounting, and finance
- B. Operations, production, and finance
- C. Production, marketing, and human resources
- D. Operations, finance, and marketing
- 12. The three major functions of business organizations:
- A. Are mutually exclusive
- B. Function independently of each other
- C. Interface with each other
- D. Do not interface with each other

13. Which one of the following would not generally be classified as an input in a university system?

- A. Staff
- **B.** Facilities
- C. Knowledge
- D. Research

14. The four major decision responsibilities of operations management are:

- A. Process, quality, capacity, and human resources
- B. Process, quality, human resources, and inventory
- C. Quality, inventory, human resources, and capacity
- D. Process, capacity, quality, and inventory

15. Which of the following is not in the process category of the operations decision framework?

A. Layout of the facility

B. Job design

C. The type of equipment and technology

D. Product or service inspection

16. Supply chain management includes the integration of:

A. Suppliers

B. Manufacturers

C. Customers

D. All of the above

- 17. The supply chain extends from:
- A. Supplier to manufacturing

B. Supplier to supplier

C. Dealer to customer

D. Supplier to customer

18. Supply chain management includes all of the following except:

A. Purchasing

B. Inventory control

C. Advertising

D. Customer service

19. A comprehensive decision-making framework for operations includes:

A. Consideration of other organizational functions

B. Consideration of operations in isolation of other functions

C. Suppliers but not customers

D. Customers but not suppliers

## True / False Questions

20. The *transformation* view of the Operations function provides a unified approach for studying the manufacturing and service industries. True False

21. The process view provides a basis for viewing an entire business as a system of interconnected processes. True False

22. "Lean Operations" refers to the task of reducing the defect rates in a firm's products or services. True False

23. As price increases and benefits remain constant, the value of a product increases. True False

24. Best practices in operations are best for all organizations. True False

## **Essay Questions**

25. The Operations definition emphasizes *decision*, *function* and *process* elements of the organization. Briefly discuss the need to address these fundamental elements.

26. Identify the critical operations decision areas in an organization and discuss the responsibilities of an operations manager while addressing these decisions.

27. What are the five inputs and two outputs of an operations transformation process?

28. Why are environmental concerns and sustainability often addressed in the operations function?

29. Why are supply chain management and globalization contemporary operations issues?

# Chapter 1 The Operations Function Answer Key

#### **Multiple Choice Questions**

1. Why is operations management a more encompassing term than production management?

A. Operations management is concerned with multiple products and services

**B.** Operations management refers to service as well as manufacturing organizations

C. Operations management is broader including the financing and marketing functions

D. Operations management makes use of the tools of quantitative analysis and computer systems

Difficulty: Moderate

2. Which of the following functions is responsible for the actual movement of goods and/or services across organizations?

<u>A.</u> Logistics

B. Operations

C. Purchasing

D. None of these

Difficulty: Easy

3. Approximately, what percentage of the American workforce works in service industries?

A. 20%

B. 40%

<u>C.</u> 80%

D. 90%

Difficulty: Moderate

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- 4. The four decision areas in operations management are:
- A. Planning, technology, inventory, and control
- **B.** Process, quality, capacity, and inventory
- C. Process, quality, technology, and capacity
- D. None of these

Difficulty: Easy

- 5. A productive systems approach:
- A. Views operations as a separate organizational function
- **B.** Must provide feedback information for control of process inputs and technology
- C. Is of limited use in service organizations
- D. Disregards human and social concerns

Difficulty: Hard

- 6. Capacity decisions:
- A. Include staffing and scheduling
- B. Include inventory control
- C. Include defining product specifications
- D. None of these

Difficulty: Moderate

- 7. Inventory decisions involve:
- A. Determining what to order, how much to order, and when to order
- B. Tracking the flow of materials
- C. Managing the finished goods inventories
- **D.** All of these

Difficulty: Easy

- 8. The contemporary operations themes signify that:
- A. More emphasis should be placed on manufacturing than on service industries
- **<u>B.</u>** Every operation should be externally directed to meet the customers' requirements
- C. Operations decisions should precede decisions in other functions in an organization
- D. To be competitive, strategies for operations should exclude broader supply chain issues

Difficulty: Hard

- 9. The essence of operations management can be described by:
- A. Process, capacity, and people
- **<u>B.</u>** Decisions, function, and process
- C. Planning, control, and organization
- D. Integrated planning and control

Difficulty: Moderate

- 10. Which of the following is not a contemporary theme in operations?
- A. Globalization of Operations
- **B.** Lean Operations
- **<u>C.</u>** Quality Teams
- D. Environmental Concerns and Sustainability

Difficulty: Hard

- 11. The three primary functions that exist in most business organizations are:
- A. Operations, accounting, and finance
- B. Operations, production, and finance
- C. Production, marketing, and human resources
- **<u>D.</u>** Operations, finance, and marketing

Difficulty: Moderate

- 12. The three major functions of business organizations:
- A. Are mutually exclusive
- B. Function independently of each other
- C. Interface with each other
- D. Do not interface with each other

Difficulty: Easy

13. Which one of the following would not generally be classified as an input in a university system?

- A. Staff
- B. Facilities
- C. Knowledge
- **D.** Research

Difficulty: Hard

- 14. The four major decision responsibilities of operations management are:
- A. Process, quality, capacity, and human resources
- B. Process, quality, human resources, and inventory
- C. Quality, inventory, human resources, and capacity
- D. Process, capacity, quality, and inventory

Difficulty: Easy

15. Which of the following is not in the process category of the operations decision framework?

- A. Layout of the facility
- B. Job design
- C. The type of equipment and technology
- **<u>D.</u>** Product or service inspection

Difficulty: Hard

16. Supply chain management includes the integration of:

A. Suppliers

B. Manufacturers

- C. Customers
- **<u>D.</u>** All of the above

Difficulty: Moderate

- 17. The supply chain extends from:
- A. Supplier to manufacturing
- B. Supplier to supplier
- C. Dealer to customer
- **D.** Supplier to customer

Difficulty: Moderate

- 18. Supply chain management includes all of the following except:
- A. Purchasing
- B. Inventory control
- C. Advertising
- D. Customer service

Difficulty: Easy

- 19. A comprehensive decision-making framework for operations includes:
- A. Consideration of other organizational functions
- B. Consideration of operations in isolation of other functions
- C. Suppliers but not customers
- D. Customers but not suppliers

Difficulty: Moderate

True / False Questions

20. The *transformation* view of the Operations function provides a unified approach for studying the manufacturing and service industries. **TRUE** 

Difficulty: Easy

21. The process view provides a basis for viewing an entire business as a system of interconnected processes. **TRUE** 

Difficulty: Moderate

22. "Lean Operations" refers to the task of reducing the defect rates in a firm's products or services.

# FALSE

Difficulty: Moderate

23. As price increases and benefits remain constant, the value of a product increases. **FALSE** 

Difficulty: Moderate

24. Best practices in operations are best for all organizations. **FALSE** 

Difficulty: Moderate

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## **Essay Questions**

25. The Operations definition emphasizes *decision*, *function* and *process* elements of the organization. Briefly discuss the need to address these fundamental elements.

The operations function is responsible for planning and controlling the production system and its interfaces with the organization and with the external environment. The operations definition emphasizes decision, functional relationships and process elements of an organization. The operations function is responsible for making decisions regarding process, quality, capacity and inventory choices, which are vital to any organization. The functional element of the operations is responsible for supplying or developing the products or rendering the required services for the business. It also links the manufacturing/service operations to other functions such as marketing, finance, etc. The process view provides a common ground for defining service and manufacturing operations as a transformation process for converting the right kind of inputs into outputs.

These elements are critical for successful functioning of any organization, and it is for these reasons one should address the three fundamental elements of operations. (Refer to Section 1.2 to augment this answer)

Difficulty: Moderate

26. Identify the critical operations decision areas in an organization and discuss the responsibilities of an operations manager while addressing these decisions.

The critical decision areas in an organization include:

(a) *Process* 

(b) *Quality* 

(c) *Capacity* 

(d) Inventory

(Refer to Section 1.4 in the textbook for a detailed explanation on these decision areas)

Difficulty: Moderate

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27. What are the five inputs and two outputs of an operations transformation process?

The five inputs include: energy, materials, labor, capital, and information. The two outputs include: goods and services (Refer to Section 1.6 to augment this answer)

Difficulty: Moderate

28. Why are environmental concerns and sustainability often addressed in the operations function?

Organizations are increasingly being asked to produce and deliver products and service while minimizing the negative impact on the global ecosystem and not endangering the ability to mee the needs of future generations.

(Refer to Section 1.7 to augment this answer)

Difficulty: Moderate

29. Why are supply chain management and globalization contemporary operations issues?

Managing the supply chain requires managers to consider the entire flow of materials, information, and money throughout the supply chain, from raw materials through production and distribution to the final customers. Strategies for operations should be formulated with global effects in mind. Even many small businesses compete globally, sourcing or selling goods and services in markets with global competitors.

Both issues are increasingly complex and are requiring additional operations manager or supply chain manager attention. (Refer to Section 1.7 to augment this answer)

Difficulty: Moderate

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