## Competitiveness, Strategy, and Productivity

## True / False Questions

1. An example of a strategic operations management decision is the choice of where to locate.

True False
2. An example of an operational operations management decision is inventory level management.

True False
3. Government statistics are a good source of data about productivity trends in the service sector.

True False
4. An example of a tactical operations management decision is determining employment levels.

True False
5. Productivity is defined as the ratio of output to input.

True False
6. Productivity is defined as the ratio of input to output.

True False
7. Competitiveness relates to the profitability of an organization in the marketplace.

True False
8. If people would only work harder, productivity would increase.

True False
9. Tracking productivity measures over time enables managers to judge organizational performance and decide where improvements are needed.

True False
10. Productivity is directly related to the ability of an organization to compete.

True False
11. A characteristic that was once an order winner may become an order qualifier, and vice versa.

True False
12. Outsourcing tends to improve quality but at the cost of lowered productivity.

True False
13. Productivity tends to be only a very minor factor in an organization's ability to compete.

True False
14. An organization that is twice as productive as its competitor will be twice as profitable.

True False
15. National productivity is determined by averaging the productivity measures of various companies or industries.

True False
16. Wage and salary increases that are not accompanied by productivity increases tend to exert inflationary pressures on a nation's economy.

True False
17. Global competition really only applies to multinational organizations.

True False
18. A business that is rated highly by its customers for service quality will tend to be more profitable than a business that is rated poorly.

True False
19. Services often don't fit simple yield measurements.

True False
20. A mission statement should provide a guide for the formulation of strategies for the organization.

True False
21. The hierarchy and sequence of planning and decision making is: mission, organizational strategy, tactics, and operational decisions.

True False
22. Strategy includes both organizational and functional strategies.

True False
23. Organizational strategy should be determined without considering the realities of functional area strengths and weaknesses since they can be changed to meet our strategy.

True False
24. Mission statements should be as specific as possible regarding exactly how they will be accomplished.

True False
25. Improving efficiency will guarantee a similar improvement in productivity.

True False
26. As long as we match a competitor on quality and price we will gain market share.

True False
27. Environmental scanning is a search for events or trends that present either threats or opportunities to the organization.

True False
28. Standardization has the advantage of reducing variability.

True False
29. Traditional strategies of business organizations have tended to emphasize cost minimization or product differentiation.

True False
30. The majority of our textbook deals with tactical operations that support established functional strategies.

True False

## Multiple Choice Questions

31. Which of the following is least likely to affect the cost an organization incurs in producing its products or services?
A. price
B. productivity
C. location
D. quality
E. inventory management
32. Where a firm locates would typically not affect that firm's:
A. costs.
B. convenience for customers.
C. delivery times.
D. strategy.
E. transportation costs.
33. Which of the following is not among the chief reasons organizations fail?
A. overemphasis on short-term financial performance
B. emphasizing labor productivity in labor-intensive environments
C. poor internal communications
D. not investing in capital and human resources
E. overemphasis on product (or service) design
34. The key to successfully competing is understanding what customers want and then $\qquad$ satisfy those wants.
A. training production workers to
B. finding suppliers who can
C. finding the best way to
D. designing products and services that
E. hiring enough workers to
35. An organization's mission statement serves as the basis for:
A. environmental scanning.
B. core competencies.
C. operating procedures.
D. distinctiveness.
E. organizational goals.
36. Which of the following would be least important in the pursuit of a time-based strategy?
A. cost minimization
B. quick changeover times
C. operational agility
D. reduced complaint resolution times
E. flexible technology
37. Competitiveness doesn't include:
A. productivity.
B. effectiveness.
C. profitability.
D. operations strategy.
E. operations management.
38. Product design and choice of location are examples of $\qquad$ decisions.
A. strategic
B. tactical
C. operational
D. customer-focused
E. design
39. Scheduling personnel is an example of an operations management:
A. mission implementation.
B. operational decision.
C. organizational strategy.
D. functional strategy.
E. tactical decision.
40. Productivity is expressed as:
A. output plus input.
B. output minus input.
C. output times input.
D. output divided by input.
E. input divided by output.
41. In the 1970s and early 1980s in the United States, organizations concentrated on:
A. operations strategies.
B. improving quality.
C. marketing and financial strategies.
D. revising mission statements.
E. environmental issues.
42. Which of the following is not a factor that affects productivity?
A. computer viruses
B. design of the workspace
C. use of the Internet
D. standardizing processes
E. product price
43. Which of these factors would be least likely to affect productivity?
A. methods and technology
B. workers
C. management
D. product mix
E. advertising
44. Which of the following is not a key step toward improving productivity?
A. developing productivity measures for all operations
B. improving the bottleneck operations
C. establishing reasonable goals for improvement
D. considering incentives to reward workers
E. converting bond debt to stock ownership
45. For an organization to grow its market share, it must:
A. advertise using multimedia.
B. reduce prices.
C. exceed minimum standards of acceptability for its products or services.
D. establish an Internet Web site.
E. broaden its mission statement.
46. The ratio of good output to quantity of raw material input is called
A. nondefective productivity.
B. process yield.
C. worker quality measurement.
D. total quality productivity.
E. quantity/quality ratio.
47. The fundamental purpose for the existence of any organization is described by its:
A. policies.
B. procedures.
C. corporate charter.
D. mission statement.
E. bylaws.
48. A productivity increase in one operation that does not improve overall productivity of the business is not
A. worthwhile.
B. trivial.
C. competence-destroying.
D. an order winner.
E. an order qualifier.
49. Value added can be calculated by:
A. average productivity gains over time.
B. inputs divided by the outputs.
C. outputs divided by the inputs.
D. input plus output divided by two.
E. outputs minus inputs.
50. Which of the following is true?
A. Corporate strategy is shaped by functional strategies.
B. Corporate mission is shaped by corporate strategy.
C. Functional strategies are shaped by corporate strategy.
D. External conditions are shaped by corporate mission.
E. Corporate mission is shaped by functional strategies.
51. Core competencies in organizations generally do not relate to:
A. cost.
B. quality.
C. time.
D. flexibility.
E. sales price.
52. With regard to operations strategy, organization strategy should, ideally, take into account:
A. operations' strengths and weaknesses.
B. inventory levels.
C. labor productivity.
D. product mix.
E. production processes.
53. Which of the following is not typically considered a cure for poor competitiveness?
A. Remove communications barriers within organizations.
B. Minimize attention to the operations function.
C. Put less emphasis on short-term financial results.
D. Recognize labor as a valuable asset and act to develop it.
E. Improve quality.
54. Time-based approaches of business organizations focus on reducing the time to accomplish certain necessary activities. Time reductions seldom apply to:
A. product/service design time.
B. processing time.
C. delivery time.
D. response time for complaints.
E. internal audits.
55. The external elements of SWOT analysis are:
A. strengths and weaknesses.
B. strengths and threats.
C. opportunities and threats.
D. weaknesses and opportunities.
E. strengths and opportunities.
56. In an assembly operation at a furniture factory, six employees assembled an average of 450 standard dining chairs per five-day week. What is the labor productivity of this operation?
A. 90 chairs/worker/day
B. 20 chairs/worker/day
C. 15 chairs/worker/day
D. 75 chairs/worker/day
E. 60 chairs/worker/day
57. Which of the following is not a reason for poor performance of our organization in the marketplace?
A. placing too much emphasis on product/service design and too little on process design
B. failing to take into account customer wants and needs
C. putting too much emphasis on short-term financial performance
D. taking advantage of strengths/opportunities, and recognizing competitive threats
E. failing to monitor the external environment
58. The manager of a carpet store is trying to determine the best installation crew size. He has tried various crew sizes with the results shown below. Based on productivity, what crew size do you recommend?

| Crew Size | Yards Installed |
| :--- | :---: |
| 2 | 716 |
| 4 | 1298 |
| 3 | $10: 7$ |
| 3 | 1002 |
| 4 | 1278 |
| 2 | 702 |

A. 2
B. 3
C. 4
59. Which of the following is not a key factor of competitiveness?
A. price
B. product differentiation
C. flexibility
D. after-sale service
E. size of organization
60. Gourmet Pretzels bakes soft pretzels on an assembly line. It currently bakes 800 pretzels each eight-hour shift. If the production is increased to 1,200 pretzels each shift, then productivity will have increased by:
A. 50 percent.
B. 33 percent.
C. 25 percent.
D. 67 percent.
61. The weekly output of a fabrication process is shown below, together with data for labor and material inputs. Standard selling price is $\$ 125$ per unit. Overhead is charged weekly at the rate of $\$ 1,500$ plus .5 times direct labor cost. Assume a 40 -hour week and an hourly wage of $\$ 16$.
Material cost is $\$ 10$ per foot. What is the average multifactor productivity?

| Week | Output | \# Workers | Material (ft) |
| :--- | :---: | :---: | :---: |
| 1 | 392 | 5 | 2720 |
| 2 | 408 | 6 | 2790 |

A. 1.463
B. 1.457
C. 1.431
62. The Balanced Scorecard is a useful tool for helping managers translate their strategy into action in the following areas:
A. Sustainability; Flexibility; Efficiency; Technology
B. Customers; Financial; Internal Business Processes; Learning and Growth
C. Customization; Standardization; Efficiency; Effectiveness
D. The Environment; The Community; Suppliers; Other Stakeholders
E. Strategy; Tactics; Productivity; Profitability
63. A firm pursuing a strategy based on customization and variety will tend to structure and manage its supply chain to accommodate more $\qquad$ than a firm pursuing a strategy based on low cost and high volume.
A. variation
B. streamlined flow
C. quality
D. capacity
E. productivity
64. Unique attributes of firms that give them a competitive edge are called:
A. functional strategies.
B. Balanced Scorecards.
C. supply chains.
D. core competencies.
E. sustainable initiatives.
65. Years ago in the overnight delivery business, providing package tracking capability gave some firms a competitive advantage. Now, all firms must offer this capability simply to be in this line of business. This is an example of $\qquad$ becoming $\qquad$ over time.
A. tactical implications; strategic
B. strategic implications; tactical
C. order winners; order qualifiers
D. profitability factors; productivity factors
E. order qualifiers; order winners
66. For firms competing in worldwide markets, conducting $\qquad$ is more complex, since what works in one country or region might not work in another.
A. productivity analysis
B. environmental analysis
C. strategy implementation
D. sustainability analysis
E. growth forecasting
67. Increasing the service offered to the customer makes it more difficult to compete on the basis of:
A. order qualifiers.
B. customization.
C. quality.
D. price.
E. flexibility.
68. $\qquad$ is generally used to facilitate an organization strategy that emphasizes low cost.
A. Speed to market
B. Flexibility
C. Customization
D. Sustainability
E. Standardization
69. Which of the following factors would tend to reduce productivity?
A. improvements in workplace safety
B. reductions in labor turnover
C. more inexperienced workers
D. reductions in the scrap rate
E. less variety in the product mix
70. Suppose a country's productivity last year was 84 . If this country's productivity growth rate of 5 percent is to be maintained, this means that this year's productivity will have to be:
A. 88.2.
B. 79.8 .
C. 82.8.
D. 78.9.
E. 4.2.

## Essay Questions

71. The weekly output of a production process is shown below, together with data for labor and material inputs. The standard inventory value of the output is $\$ 125$ per unit. Overhead is charged weekly at the rate of $\$ 1,500$ plus .5 times direct labor cost. Assume a 40 -hour week and an hourly wage of $\$ 16$. Material cost is $\$ 10$ per running foot. What is the average multifactor productivity for this process?

| Week | Output | \#Workers | Material(f) |
| :--- | :---: | :---: | :---: |
| 1 | 412 | 6 | 2840 |
| 2 | 364 | 5 | 2550 |
| 3 | 392 | 5 | 2720 |
| 4 | 408 | 6 | 2790 |

72. A company has introduced a process improvement that reduces processing time for each unit; output is increased by 25 percent with less material, but one additional worker is required. Under the old process, five workers could produce 60 units per hour. Labor costs are $\$ 12 / \mathrm{hour}$, and material input was previously $\$ 16 / u n i t$. For the new process, material is now $\$ 10 / u n i t$. Overhead is charged at 1.6 times direct labor cost. Finished units sell for $\$ 31$ each. What increase in productivity is associated with the process improvement?

# Chapter 02 Competitiveness, Strategy, and Productivity Answer Key 

## True / False Questions

1. An example of a strategic operations management decision is the choice of where to locate.

## TRUE

Location decisions are strategic in nature.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

Blooms: Remember
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.
Level of Difficulty: 3 Haro
Topic: Operations Strategy
2. An example of an operational operations management decision is inventory level management.

## TRUE

Inventory management is an operational decision.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Level of Difficulty: 3 Hara
Topic: Operations Strategy
3. Government statistics are a good source of data about productivity trends in the service sector.

## FALSE

The service sector is often omitted in government statistics.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

Blooms: Remembeı
Learning Objective: 02-07 Describe several factors that affect productivity.
Level of Difficulty: 2 Medium
Topic: Productivity
4. An example of a tactical operations management decision is determining employment levels.

## TRUE

Staffing is an ongoing, tactical decision.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

Blooms: Remembeı
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
link the two.
Level of Difficulty: 3 Hara
Topic: Operations Strategy
5. Productivity is defined as the ratio of output to input.

## TRUE

Divide outputs by inputs to get productivity.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries. Level of Difficulty: 1 Easy
6. Productivity is defined as the ratio of input to output.

## FALSE

Productivity is the ratio of outputs to inputs.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remembeı<br>Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

7. Competitiveness relates to the profitability of an organization in the marketplace.

## FALSE

Competitiveness relates to how effectively an organization meets the wants and needs of customers relative to other organizations that offer similar goods or services.

AACSB: Reflective Thinking
8. If people would only work harder, productivity would increase.

## FALSE

Working harder can actually reduce productivity in some cases.
9. Tracking productivity measures over time enables managers to judge organizational performance and decide where improvements are needed.

## TRUE

Productivity trends direct attention toward problems and opportunities.
AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-07 Describe several factors that affect productivity.
Level of Difficulty: 2 Medium
Topic: Productivity
10. Productivity is directly related to the ability of an organization to compete.

## TRUE

A more productive organization is a more competitive organization.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries. Level of Difficulty: 1 Easy

Topic: Productivity
11. A characteristic that was once an order winner may become an order qualifier, and vice versa.

## TRUE

Order qualifiers and order winners are shaped by the environment.

AACSB: Reflective Thinking
12. Outsourcing tends to improve quality but at the cost of lowered productivity.

## FALSE

Outsourcing can lead to both quality and productivity improvements.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

Blooms: Understana
Learning Objective: 02-07 Describe several factors that affect productivity.
Level of Difficulty: 2 Medium
Topic: Productivity
13. Productivity tends to be only a very minor factor in an organization's ability to compete.

## FALSE

An organization's ability to compete is directly affected by its productivity.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.
Level of Difficulty: 1 Easy
Topic: Productivity
14. An organization that is twice as productive as its competitor will be twice as profitable.

## FALSE

Productivity advantages don't necessarily translate into profitability advantages.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understana
Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

## 2-22

Copyright © 2015 McGraw-Hill Education. All rights reserved. No reproduction or distribution without the prior written consent of McGraw-Hill Education.
15. National productivity is determined by averaging the productivity measures of various companies or industries.

## FALSE

National productivity is determined by dividing inputs by outputs across a national economy; averaging industry measures would lead to a distorted estimate.

AACSB: Reflective Thinking<br>Accessibility: Keyboard Navigation<br>Blooms: Remembeı<br>Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.<br>Level of Difficulty: 2 Medium<br>Topic: Productivity

16. Wage and salary increases that are not accompanied by productivity increases tend to exert inflationary pressures on a nation's economy.

## TRUE

True increases in standards of living come about through productivity improvements.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.
Level of Difficulty: 2 Medium
Topic: Productivity
17. Global competition really only applies to multinational organizations.

## FALSE

Domestic-only organizations experience competition from organizations in other countries.

AACSB: Reflective Thinking

# Accessibility: Keyboard Navigation <br> Blooms: Understana <br> Learning Objective: 02-03 Define the terms mission and strategy and explain why they are important. <br> Level of Difficulty: 2 Medium <br> Topic: Mission and Strategies 

18. A business that is rated highly by its customers for service quality will tend to be more profitable than a business that is rated poorly.

## TRUE

Service quality is a powerful tool for improving profitability

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understana
Learning Objective: 02-01 List several ways that business organizations compete.
Level of Difficulty: 1 Easy
Topic: Competitiveness
19. Services often don't fit simple yield measurements.

## TRUE

Comparing one service output to another is difficult to do accurately.

AACSB: Reflective Thinking
20. A mission statement should provide a guide for the formulation of strategies for the organization.

## TRUE

Strategy-making is constrained by the mission statement.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-03 Define the terms mission and strategy and explain why they are important.
Level of Difficulty: 1 Easy
Topic: Mission and Strategies
21. The hierarchy and sequence of planning and decision making is: mission, organizational strategy, tactics, and operational decisions.

## TRUE

Mission is at the highest level of the hierarchy, while operational decisions are at the lowest.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
link the two.
Level of Difficulty: 2 Medium
Topic: Mission and Strategies
22. Strategy includes both organizational and functional strategies.

## TRUE

Organizational strategies shape functional strategies.

# AACSB: Reflective Thinking <br> Accessibility: Keyboard Navigation <br> Blooms: Remembeı 

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
23. Organizational strategy should be determined without considering the realities of functional area strengths and weaknesses since they can be changed to meet our strategy.

## FALSE

Functional strengths and weaknesses serve as the building blocks of organizational strategy.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understana
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
link the two.
Level of Difficulty: 2 Medium
Topic: Mission and Strategies
24. Mission statements should be as specific as possible regarding exactly how they will be accomplished.

## FALSE

Mission statements are very long-term and should provide enough room to accommodate major changes in direction.

AACSB: Reflective Thinking<br>Accessibility: Keyboard Navigation<br>Blooms: Understana<br>Learning Objective: 02-03 Define the terms mission and strategy and explain why they are important.<br>Level of Difficulty: 2 Medium<br>Topic: Mission and Strategies

25. Improving efficiency will guarantee a similar improvement in productivity.

## FALSE

Efficiency is narrower than productivity.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

Blooms: Understana
Learning Objective: 02-07 Describe several factors that affect productivity.
Level of Difficulty: 2 Medium
Topic: Productivity
26. As long as we match a competitor on quality and price we will gain market share.

## FALSE

We usually have to better a competitor to win market share.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understana
Learning Objective: 02-02 Name several reasons that business organizations fail.
Level of Difficulty: 1 Easy Topic: Competitiveness
27. Environmental scanning is a search for events or trends that present either threats or opportunities to the organization.

## TRUE

These events or trends should be taken into account when strategy is being formulated.

AACSB: Reflective Thinking<br>Accessibility: Keyboard Navigation<br>Blooms: Remembeı<br>Learning Objective: 02-03 Define the terms mission and strategy and explain why they are important.<br>Level of Difficulty: 2 Medium<br>Topic: Mission and Strategies

28. Standardization has the advantage of reducing variability.

## TRUE

Standardization leads to reduced variability.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understana
Learning Objective: 02-07 Describe several factors that affect productivity.
Level of Difficulty: 1 Easy
Topic: Productivity
29. Traditional strategies of business organizations have tended to emphasize cost minimization or product differentiation.

## TRUE

Time- and quality-based strategies are more recent developments.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-05 Describe and give examples of time-based strategies. Level of Difficulty: 2 Medium Topic: Operations Strategy
30. The majority of our textbook deals with tactical operations that support established functional strategies.

## TRUE

This represents the majority of ongoing decision making in operations.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to

## Multiple Choice Questions

31. Which of the following is least likely to affect the cost an organization incurs in producing its products or services?
A. price
B. productivity
C. location
D. quality
E. inventory management

Relative to the other choices, price is least likely to affect cost.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understana Learning Objective: 02-01 List several ways that business organizations compete. Level of Difficulty: 2 Medium

Topic: Competitiveness
32. Where a firm locates would typically not affect that firm's:
A. costs.
B. convenience for customers.
C. delivery times.
D. strategy.
E. transportation costs.

Typically, strategy dictates where firms will locate, rather than location dictating strategy.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understana
Learning Objective: 02-01 List several ways that business organizations compete.
Level of Difficulty: 2 Medium
Topic: Mission and Strategies
33. Which of the following is not among the chief reasons organizations fail?
A. overemphasis on short-term financial performance
B. emphasizing labor productivity in labor-intensive environments
C. poor internal communications
D. not investing in capital and human resources
E. overemphasis on product (or service) design

In labor-intensive environments, emphasizing labor productivity is a good idea.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remembeı Learning Objective: 02-02 Name several reasons that business organizations fail. Level of Difficulty: 1 Easy Topic: Competitiveness
34. The key to successfully competing is understanding what customers want and then $\qquad$ satisfy those wants.
A. training production workers to
B. finding suppliers who can
C. finding the best way to
D. designing products and services that
E. hiring enough workers to

To successfully compete, two basic issues must be addressed: What do the customers want? What is the best way to satisfy those wants?

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understana
Learning Objective: 02-02 Name several reasons that business organizations fail.
Level of Difficulty: 2 Medium
Topic: Competitiveness
35. An organization's mission statement serves as the basis for:
A. environmental scanning.
B. core competencies.
C. operating procedures.
D. distinctiveness.
E. organizational goals.

Organizations' missions serve as the broad underpinning for their goals.

AACSB: Reflective Thinking

Blooms: Remembeı
Learning Objective: 02-03 Define the terms mission and strategy and explain why they are important.
Level of Difficulty: 2 Medium
Topic: Competitiveness
36. Which of the following would be least important in the pursuit of a time-based strategy?
A. cost minimization
B. quick changeover times
C. operational agility
D. reduced complaint resolution times
E. flexible technology

Many means for minimizing cost would have the effect of making a time-based strategy less feasible.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

Blooms: Understana
Learning Objective: 02-05 Describe and give examples of time-based strategies.
Level of Difficulty: 2 Medium
Topic: Mission and Strategies
37. Competitiveness doesn't include:
A. productivity.
B. effectiveness.
C. profitability.
D. operations strategy.
E. operations management.

A company can be competitive relative to similar companies and still be unprofitable if the competitive environment is inherently unprofitable.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understana
Learning Objective: 02-01 List several ways that business organizations compete.
Level of Difficulty: 3 Hara
Topic: Competitiveness
38. Product design and choice of location are examples of $\qquad$ decisions.
A. strategic
B. tactical
C. operational
D. customer-focused
E. design

These decisions are made high in the hierarchy.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-03 Define the terms mission and strategy and explain why they are important.
Level of Difficulty: 3 Haro
Topic: Mission and Strategies
39. Scheduling personnel is an example of an operations management:
A. mission implementation.
B. operational decision.
C. organizational strategy.
D. functional strategy.
E. tactical decision.

Staffing-level decisions are made low in the hierarchy.

AACSB: Reflective Thinking
40. Productivity is expressed as:
A. output plus input.
B. output minus input.
C. output times input.
D. output divided by input.
E. input divided by output.

Productivity is the ratio of outputs to inputs.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.
Level of Difficulty: 1 Easy
Topic: Productivity
41. In the 1970s and early 1980s in the United States, organizations concentrated on:
A. operations strategies.
B. improving quality.
C. marketing and financial strategies.
D. revising mission statements.
E. environmental issues.

This led to U.S. firms being not very competitive with regard to their operations.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remember
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
link the two.
Level of Difficulty: 2 Medium
Topic: Operations Strategy
42. Which of the following is not a factor that affects productivity?
A. computer viruses
B. design of the workspace
C. use of the Internet
D. standardizing processes
E. product price

These don't lead to fundamental changes in operations.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-07 Describe several factors that affect productivity.
Level of Difficulty: 2 Medium
Topic: Productivity
43. Which of these factors would be least likely to affect productivity?
A. methods and technology
B. workers
C. management
D. product mix
E. advertising

Advertising could increase the value of the outputs, but it is less likely to affect productivity than these other factors.

AACSB: Reflective Thinking

Blooms: Understana
Learning Objective: 02-07 Describe several factors that affect productivity.
Level of Difficulty: 2 Medium
Topic: Productivity
44. Which of the following is not a key step toward improving productivity?
A. developing productivity measures for all operations
B. improving the bottleneck operations
C. establishing reasonable goals for improvement
D. considering incentives to reward workers
E. converting bond debt to stock ownership

A firm's productivity is independent of its capital structure.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-07 Describe several factors that affect productivity.
Level of Difficulty: 2 Medium
Topic: Productivity
45. For an organization to grow its market share, it must:
A. advertise using multimedia.
B. reduce prices.
C. exceed minimum standards of acceptability for its products or services.
D. establish an Internet Web site.
E. broaden its mission statement.

Only by exceeding standards can an organization grow its market share.

AACSB: Reflective Thinking
46. The ratio of good output to quantity of raw material input is called
A. nondefective productivity.
B. process yield.
C. worker quality measurement.
D. total quality productivity.
E. quantity/quality ratio.

This is sometimes a useful productivity measure in service industries.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.
Level of Difficulty: 3 Haro
Topic: Productivity
47. The fundamental purpose for the existence of any organization is described by its:
A. policies.
B. procedures.
C. corporate charter.
D. mission statement.
E. bylaws.

A mission statement is the organization's attempt to justify its existence.

AACSB: Reflective Thinking
48. A productivity increase in one operation that does not improve overall productivity of the business is not
A. worthwhile.
B. trivial.
C. competence-destroying.
D. an order winner.
E. an order qualifier.

Only system-wide productivity improvement makes the organization more productive.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

Blooms: Understana
Learning Objective: 02-07 Describe several factors that affect productivity.
Level of Difficulty: 3 Haro
Topic: Productivity
49. Value added can be calculated by:
A. average productivity gains over time.
B. inputs divided by the outputs.
C. outputs divided by the inputs.
D. input plus output divided by two.
E. outputs minus inputs.

Value added represents the change in value of the original inputs.

AACSB: Reflective Thinking
50. Which of the following is true?
A. Corporate strategy is shaped by functional strategies.
B. Corporate mission is shaped by corporate strategy.
C. Functional strategies are shaped by corporate strategy.
D. External conditions are shaped by corporate mission.
E. Corporate mission is shaped by functional strategies.

Corporate strategy shapes strategies at lower levels.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
link the two.
Level of Difficulty: 3 Haro
Topic: Mission and Strategies
51. Core competencies in organizations generally do not relate to:
A. cost.
B. quality.
C. time.
D. flexibility.
E. sales price.

What a firm charges for its outputs is not a core competency. What it can charge, however, is potentially related to a core competency.

AACSB: Reflective Thinking

Blooms: Understana
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
link the two.
Level of Difficulty: 2 Medium
Topic: Mission and Strategies
52. With regard to operations strategy, organization strategy should, ideally, take into account:
A. operations' strengths and weaknesses.
B. inventory levels.
C. labor productivity.
D. product mix.
E. production processes.

Formulation of organization strategy should take into account the realities of operations' strengths and weaknesses, capitalizing on strengths and dealing with weaknesses.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understana
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to

Level of Difficulty: 1 Easy
Topic: Operations Strategy
53. Which of the following is not typically considered a cure for poor competitiveness?
A. Remove communications barriers within organizations.
B. Minimize attention to the operations function.
C. Put less emphasis on short-term financial results.
D. Recognize labor as a valuable asset and act to develop it.
E. Improve quality.

Operations is a prime area for improving competitiveness.

AACSB: Reflective Thinking
54. Time-based approaches of business organizations focus on reducing the time to accomplish certain necessary activities. Time reductions seldom apply to:
A. product/service design time.
B. processing time.
C. delivery time.
D. response time for complaints.
E. internal audits.

Internal audits have little to do with core value-adding efforts.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-05 Describe and give examples of time-based strategies.
Level of Difficulty: 2 Medium
Topic: Operations Strategy
55. The external elements of SWOT analysis are:
A. strengths and weaknesses.
B. strengths and threats.
C. opportunities and threats.
D. weaknesses and opportunities.
E. strengths and opportunities.

Opportunities and threats relate to the organization and its external environment.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-03 Define the terms mission and strategy and explain why they are important.
Level of Difficulty: 2 Medium
Topic: Mission and Strategies
56. In an assembly operation at a furniture factory, six employees assembled an average of 450 standard dining chairs per five-day week. What is the labor productivity of this operation?
A. 90 chairs/worker/day
B. 20 chairs/worker/day
C. 15 chairs/worker/day
D. 75 chairs/worker/day
E. 60 chairs/worker/day

Divide the output of 450 chairs by the inputs of 30 worker-days.


#### Abstract

AACSB: Analytic Accessibility: Keyboard Navigation Blooms: Remembeı Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries. Level of Difficulty: 1 Easy Topic: Productivity


57. Which of the following is not a reason for poor performance of our organization in the marketplace?
A. placing too much emphasis on product/service design and too little on process design
B. failing to take into account customer wants and needs
C. putting too much emphasis on short-term financial performance
D. taking advantage of strengths/opportunities, and recognizing competitive threats
E. failing to monitor the external environment

Taking advantage of strengths/opportunities and recognizing competitive threats would enable good performance.

AACSB: Reflective Thinking<br>Accessibility: Keyboard Navigation<br>Blooms: Remembeı<br>Learning Objective: 02-02 Name several reasons that business organizations fail.<br>Level of Difficulty: 3 Haro<br>Topic: Competitiveness

58. The manager of a carpet store is trying to determine the best installation crew size. He has tried various crew sizes with the results shown below. Based on productivity, what crew size do you recommend?

| Crew Size | Yards Installed |
| :--- | :---: |
| 2 | 716 |
| 4 | 1298 |
| 3 | 1017 |
| 3 | 1002 |
| 4 | 1278 |
| 2 | 702 |

A. 2
B. 3
C. 4

Crews of two workers are most productive.

AACSB: Analytic
Blooms: Evaluate
Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.
Level of Difficulty: 2 Medium
Topic: Productivity
59. Which of the following is not a key factor of competitiveness?
A. price
B. product differentiation
C. flexibility
D. after-sale service
E. size of organization

Competitiveness often has nothing to do with organization size.
60. Gourmet Pretzels bakes soft pretzels on an assembly line. It currently bakes 800 pretzels each eight-hour shift. If the production is increased to 1,200 pretzels each shift, then productivity will have increased by:
A. 50 percent.
B. 33 percent.
C. 25 percent.
D. 67 percent.

Divide the difference in productivity by the original productivity.
AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.
Level of Difficulty: 2 Medium
Topic: Productivity
61. The weekly output of a fabrication process is shown below, together with data for labor and material inputs. Standard selling price is $\$ 125$ per unit. Overhead is charged weekly at the rate of $\$ 1,500$ plus .5 times direct labor cost. Assume a 40-hour week and an hourly wage of $\$ 16$. Material cost is $\$ 10$ per foot. What is the average multifactor productivity?

| Week | Output | \# Workers | Material (ft) |
| :--- | :---: | :---: | :---: |
| 1 | 392 | 5 | 2720 |
| 2 | 408 | 6 | 2790 |

A. 1.463
B. 1.457
C. 1.431

Calculate multifactor productivity for each week, then average the two.

AACSB: Analytic
Blooms: Apply
Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.
Level of Difficulty: 2 Medium
Topic: Productivity
62. The Balanced Scorecard is a useful tool for helping managers translate their strategy into action in the following areas:
A. Sustainability; Flexibility; Efficiency; Technology
B. Customers; Financial; Internal Business Processes; Learning and Growth
C. Customization; Standardization; Efficiency; Effectiveness
D. The Environment; The Community; Suppliers; Other Stakeholders
E. Strategy; Tactics; Productivity; Profitability

These are the four core areas addressed by the Balanced Scorecard.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
link the two.
63. A firm pursuing a strategy based on customization and variety will tend to structure and manage its supply chain to accommodate more $\qquad$ than a firm pursuing a strategy based on low cost and high volume.
A. variation
B. streamlined flow
C. quality
D. capacity
E. productivity

Customization and variety lead to variation that must be accommodated.
AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembel
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
link the two.
Level of Difficulty: 2 Medium
Topic: Operations Strategy
64. Unique attributes of firms that give them a competitive edge are called:
A. functional strategies.
B. Balanced Scorecards.
C. supply chains.
D. core competencies.
E. sustainable initiatives.

Core competencies can be translated into competitive advantage.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remembeı
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
65. Years ago in the overnight delivery business, providing package tracking capability gave some firms a competitive advantage. Now, all firms must offer this capability simply to be in this line of business. This is an example of $\qquad$ becoming $\qquad$ over time.
A. tactical implications; strategic
B. strategic implications; tactical
C. order winners; order qualifiers
D. profitability factors; productivity factors
E. order qualifiers; order winners

What is an order qualifier and what is an order winner changes over time.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understana
Learning Objective: 02-03 Define the terms mission and strategy and explain why they are important.
Level of Difficulty: 2 Medium
Topic: Mission and Strategies
66. For firms competing in worldwide markets, conducting $\qquad$ is more complex, since what works in one country or region might not work in another.
A. productivity analysis
B. environmental analysis
C. strategy implementation
D. sustainability analysis
E. growth forecasting

Environmental analysis takes into account the relevant factors in the environment; there are more of these if there are more markets to consider.
67. Increasing the service offered to the customer makes it more difficult to compete on the basis of:
A. order qualifiers.
B. customization.
C. quality.
D. price.
E. flexibility.

More extensive service can be more costly, and more costly outputs make price-based strategies more difficult.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

Blooms: Remembeı
Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
link the two.
Level of Difficulty: 1 Easy
Topic: Implications of Organization Strategy for Operations Management
68. $\qquad$ is generally used to facilitate an organization strategy that emphasizes low cost.
A. Speed to market
B. Flexibility
C. Customization
D. Sustainability
E. Standardization

Standardization is a powerful means of achieving low-cost production.

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to
69. Which of the following factors would tend to reduce productivity?
A. improvements in workplace safety
B. reductions in labor turnover
C. more inexperienced workers
D. reductions in the scrap rate
$E$. less variety in the product mix

More inexperienced workers tend to be less productive.

AACSB: Reflective Thinking Accessibility: Keyboard Navigation

Blooms: Understana
Learning Objective: 02-07 Describe several factors that affect productivity.
Level of Difficulty: 2 Medium
Topic: Productivity
70. Suppose a country's productivity last year was 84 . If this country's productivity growth rate of 5 percent is to be maintained, this means that this year's productivity will have to be:
A. 88.2.
B. 79.8 .
C. 82.8 .
D. 78.9 .
E. 4.2.

Multiply 84 by 1.05 and then subtract 84 from this product.

## Essay Questions

71. The weekly output of a production process is shown below, together with data for labor and material inputs. The standard inventory value of the output is $\$ 125$ per unit. Overhead is charged weekly at the rate of $\$ 1,500$ plus .5 times direct labor cost. Assume a 40 -hour week and an hourly wage of $\$ 16$. Material cost is $\$ 10$ per running foot. What is the average multifactor productivity for this process?

| Week | Output | \# Workers | Material(f) |
| :--- | :---: | :---: | :---: |
| 1 | 412 | 6 | 2840 |
| 2 | 364 | 5 | 2550 |
| 3 | 392 | 5 | 2720 |
| 4 | 408 | 6 | 2790 |

$$
\begin{aligned}
& W k 1: \frac{412(125)}{6(40)(16)+2840(10)+5(6)(40)(16)+1500}=\frac{51500}{35660}=1.444 \\
& W k 2: \frac{364(125)}{5(40)(16)+2550(10)+.5(5)(40)(16)+1500}=\frac{45500}{31800}=1.431 \\
& W k 3: \frac{392(125)}{5(40)(16)+2720(10)+.5(5)(40)(16)+1500}=\frac{49000}{33500}=1.463 \\
& W / 4: \frac{408(125)}{6(40)(16)+2790(10)+.5(6)(40)(16)+1500}=\frac{51000}{35160}=1.451 \\
& \text { Avg }=(1.444+1431+1.463+1.451 y 4=5.789 / 4=I .447 \\
& \text { Feedback: Calculate the weekly multifactor productivities and then average. }
\end{aligned}
$$

72. A company has introduced a process improvement that reduces processing time for each unit; output is increased by 25 percent with less material, but one additional worker is required. Under the old process, five workers could produce 60 units per hour. Labor costs are \$12/hour, and material input was previously $\$ 16 /$ unit. For the new process, material is now $\$ 10 /$ unit. Overhead is charged at 1.6 times direct labor cost. Finished units sell for $\$ 31$ each. What increase in productivity is associated with the process improvement?

$$
\begin{aligned}
& \text { Before: } \frac{60(31)}{5(12)+60(16)+1.6(5)(12)}=\frac{1860 / h r}{1116 / h}=1.667 \\
& \text { After: } \frac{60(1.25)(31)}{6(12)+75(10)+1.6(6)(12)}=\frac{2325 / h r}{937.2 / h r}=2.481 \\
& \text { Productivity Increase }=\frac{(2.481-1.667) \times 100 \%}{1.667}=48.83 \%
\end{aligned}
$$

Feedback: Divide the improvement in productivity by the productivity before the change.
Multiply this ratio for the percent increase.

AACSB: Analytic
Blooms: Apply
Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries. Level of Difficulty: 3 Haro

Topic: Productivity

