

Chapter 02 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 multi-national 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

31. Quality-based strategies focus on customer satisfaction by ensuring that each product is carefully and thoroughly inspected prior to delivery to prevent sending out bad product.

True False

32. Time-based strategies focus on reducing the time required to accomplish certain activities, such as new product development or delivery to the customer.

True False

33. Functional strategies should be designed to directly support a firm's mission.

True False

34. Companies are required to use environmental scanning because of both federal and state regulations regarding environmental pollution control.

True False

35. The Balanced Scorecard is an attractive tool to use in the formation of strategy.

True False

36. One major shortcoming of the Balanced Scorecard is that it doesn't tend to take into account sustainability issues.

True False

Multiple Choice Questions

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 _____ 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 1970's and 1980's in the USA, organizations concentrated on:

- A. operations strategies
- B. improving quality
- C. marketing and financial strategies
- D. revising mission statements
- E. environmental issues

42. In the past, a significant reason why U.S. productivity was the highest in the world was high:

- A. agricultural productivity
- B. manufacturing productivity
- C. labor productivity
- D. savings productivity
- E. governmental productivity

43. 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. wireless cellular phones

44. Which of these factors affects productivity?

- A. methods and technology
- B. workers
- C. management
- D. a and b only
- E. all of the above

45. 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

46. For an organization to grow its market share, it must:

- A. advertise using multimedia
- B. lower prices
- C. exceed minimum standards of acceptability for its products or services
- D. establish an internet website
- E. broaden its mission statement

47. The ratio of good output to quantity of raw material input is called

- A. non-defective productivity
- B. process yield
- C. worker quality measurement
- D. total quality productivity
- E. quantity/quality ratio

48. 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

49. A productivity increase in one operation that doesn't improve overall productivity of the business isn't

- A. worthwhile
- B. trivial
- C. competence-destroying
- D. an order winner
- E. an order qualifier

50. 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

51. 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.

52. Core competencies in organizations generally relate to:
- A. cost
 - B. quality
 - C. time
 - D. flexibility
 - E. all of the above

53. Which of the following is considered to be a cause of poor U.S. global competitiveness?
- A. the tendency to view labor as a cost factor to be minimized
 - B. decision-making based on short-term horizons
 - C. weaknesses in technological practice
 - D. powerful trading partners
 - E. all of the above

54. 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

55. 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

56. 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

57. In an assembly operation at a furniture factory, six employees assembled an average of 450 standard dining chairs per 5-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. none of the above

58. 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. none of the above

59. 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?

<u>Crew Size</u>	<u>Yards Installed</u>
2	716
4	1298
3	1017
3	1002
4	1278
2	702

- A. 2
- B. 3
- C. 4

60. 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

61. Gourmet Pretzels bakes soft pretzels on an assembly line. It currently bakes 800 pretzels each 8-hour shift. If the production is increased to 1,200 pretzels each shift, then productivity will have increased by:

- A. 50%
- B. 33%
- C. 25%
- D. 67%

62. 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?

<u>Week</u>	<u>Output</u>	<u># Workers</u>	<u>Material (ft)</u>
1	392	5	2720
2	408	6	2790

- A. 1.463
- B. 1.457
- C. 1.431

63. 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

64. A firm pursuing a strategy based on customization and variety will tend to structure and manage its supply chain to accommodate more _____ than a firm pursuing a strategy based on low-cost and high-volume.

- A. Variation
- B. Streamlined flow
- C. Quality
- D. Capacity
- E. Productivity

65. 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

66. 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 _____ becoming _____ 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

67. For firms competing in worldwide markets, conducting _____ 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

68. 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

69. _____ is generally used to facilitate an organization strategy that emphasizes low cost.

- A. Speed to market
- B. Flexibility
- C. Customization
- D. Sustainability
- E. None of the above

70. 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. none of the above

71. Suppose a country's productivity last year was 84. If this country's productivity growth rate of 5% 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

72. 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 \$1500 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 multi-factor productivity for this process?

<u>Week</u>	<u>Output</u>	<u># Workers</u>	<u>Material (ft)</u>
1	412	6	2840
2	364	5	2550
3	392	5	2720
4	408	6	2790

73. A company has introduced a process improvement that reduces processing time for each unit, so that output is increased by 25% with less material, but one additional worker 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?

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

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: 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

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Productivity in the Service Sector

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

TRUE

Staffing is an ongoing, tactical decision.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Operations Strategy

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

TRUE

Divide outputs by inputs to get productivity.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Transforming Strategy into Action: The Balanced Scorecard

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

FALSE

Productivity is the ratio of outputs to inputs.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

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

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-02 Explain five reasons for the poor competitiveness of some companies.

Topic Area: Competitiveness

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

FALSE

Working harder can actually reduce productivity in some cases.

AACSB: Reflective Thinking

Bloom's: Understand

Difficulty: Medium

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Factors that Affect Productivity

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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Improving 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

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: Mission and Strategies

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

Bloom's: Understand

Difficulty: Medium

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Factors that Affect 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

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: 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

Bloom's: Understand

Difficulty: Medium

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

17. Global competition really only applies to multi-national organizations.

FALSE

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

AACSB: Reflective Thinking

Bloom's: Understand

Difficulty: Medium

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: 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

Bloom's: Understand

Difficulty: Easy

Learning Objective: 02-01 List the three primary ways that business organizations compete.

Topic Area: 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

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Productivity in the Service Sector

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

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: 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 operation decisions are at the lowest.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Mission and Strategies

22. Strategy includes both organizational and functional strategies.

TRUE

Organizational strategies shape functional strategies.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Mission and Strategies

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

Bloom's: Understand

Difficulty: Medium

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: 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

Bloom's: Understand

Difficulty: Medium

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: Mission and Strategies

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

FALSE

Efficiency is narrower than productivity.

AACSB: Reflective Thinking

Bloom's: Understand

Difficulty: Medium

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: 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

Bloom's: Understand

Difficulty: Easy

Learning Objective: 02-02 Explain five reasons for the poor competitiveness of some companies.

Topic Area: 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: Mission and Strategies

28. Standardization has the advantage of reducing variability.

TRUE

Standardization leads to reduced variability.

AACSB: Reflective Thinking

Bloom's: Understand

Difficulty: Easy

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Improving 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-05 Describe and give examples of time-based strategies.

Topic Area: Operations Strategy

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

TRUE

This represents the majority of on-going decision-making in operations.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Mission and Strategies

31. Quality-based strategies focus on customer satisfaction by ensuring that each product is carefully and thoroughly inspected prior to delivery to prevent sending out bad product.

FALSE

Quality strategies are based on avoiding quality problems.

AACSB: Reflective Thinking

Bloom's: Understand

Difficulty: Hard

Learning Objective: 02-05 Describe and give examples of time-based strategies.

Topic Area: Operations Strategy

32. Time-based strategies focus on reducing the time required to accomplish certain activities, such as new product development or delivery to the customer.

TRUE

Being first to market or responding quickest to customer wants can be attractive strategies.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-05 Describe and give examples of time-based strategies.

Topic Area: Operations Strategy

33. Functional strategies should be designed to directly support a firm's mission.

FALSE

Functional strategies should support organizational strategy.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Operations Strategy

34. Companies are required to use environmental scanning because of both federal and state regulations regarding environmental pollution control.

FALSE

Companies are not required to use scanning, but not using scanning is risky.

AACSB: Reflective Thinking

Bloom's: Understand

Difficulty: Medium

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: Mission and Strategies

35. The Balanced Scorecard is an attractive tool to use in the formation of strategy.

FALSE

The Balanced Scorecard is used for the implementation of strategy.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Transforming Strategy into Action

36. One major shortcoming of the Balanced Scorecard is that it doesn't tend to take into account sustainability issues.

TRUE

Companies need to be aware of the impact they are having in these areas and respond accordingly.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Transforming Strategy into Action

Chapter 02 - Competitiveness, Strategy, and Productivity

Multiple Choice Questions

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

Bloom's: Understand

Difficulty: Hard

Learning Objective: 02-01 List the three primary ways that business organizations compete.

Topic Area: Competitiveness

38. Product design and choice of location are examples of _____ decisions.

- A. strategic**
- B. tactical
- C. operational
- D. customer focused
- E. design

These decisions are made high in the hierarchy.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: 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

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Operations Strategy

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

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

41. In the 1970's and 1980's in the USA, 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Operations Strategy

42. In the past, a significant reason why U.S. productivity was the highest in the world was high:

- A. agricultural productivity**
- B. manufacturing productivity
- C. labor productivity
- D. savings productivity
- E. governmental productivity

This freed up resources for productivity improvements in a wide variety of non-agricultural sectors.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

43. 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.** wireless cellular phones

These don't lead to fundamental changes in operations.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Factors that Affect Productivity

44. Which of these factors affects productivity?

- A. methods and technology
- B. workers
- C. management
- D. a and b only
- E.** all of the above

All of these affect productivity.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Factors that Affect Productivity

45. 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Improving Productivity

46. For an organization to grow its market share, it must:

- A. advertise using multimedia
- B. lower prices
- C. exceed minimum standards of acceptability for its products or services**
- D. establish an internet website
- E. broaden its mission statement

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

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: Mission and Strategies

47. The ratio of good output to quantity of raw material input is called

- A. non-defective 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

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

48. 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

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: Mission and Strategies

49. A productivity increase in one operation that doesn't improve overall productivity of the business isn't

- 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

Bloom's: Understand

Difficulty: Hard

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Improving Productivity

50. 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

51. 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

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Mission and Strategies

52. Core competencies in organizations generally relate to:

- A. cost
- B. quality
- C. time
- D. flexibility
- E. all of the above**

These are all representative of core competencies.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Mission and Strategies

53. Which of the following is considered to be a cause of poor U.S. global competitiveness?
- A. the tendency to view labor as a cost factor to be minimized
 - B. decision-making based on short-term horizons
 - C. weaknesses in technological practice
 - D. powerful trading partners
 - E. all of the above**

A number of factors can negatively shape a country's competitiveness.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-02 Explain five reasons for the poor competitiveness of some companies.

Topic Area: Competitiveness

54. 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

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-02 Explain five reasons for the poor competitiveness of some companies.

Topic Area: Competitiveness

55. 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-05 Describe and give examples of time-based strategies.

Topic Area: Operations Strategy

56. 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: Mission and Strategies

57. In an assembly operation at a furniture factory, six employees assembled an average of 450 standard dining chairs per 5-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. none of the above

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

AACSB: Analytic

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

58. 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. none of the above

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

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-02 Explain five reasons for the poor competitiveness of some companies.

Topic Area: Competitiveness

59. 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?

<u>Crew Size</u>	<u>Yards Installed</u>
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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

60. 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.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Hard

Learning Objective: 02-02 Explain five reasons for the poor competitiveness of some companies.

Topic Area: Factors that Affect Productivity

61. Gourmet Pretzels bakes soft pretzels on an assembly line. It currently bakes 800 pretzels each 8-hour shift. If the production is increased to 1,200 pretzels each shift, then productivity will have increased by:

- A.** 50%
- B. 33%
- C. 25%
- D. 67%

Divide the difference in productivity by the original productivity.

AACSB: Analytic

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

62. 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?

<u>Week</u>	<u>Output</u>	<u># Workers</u>	<u>Material (ft)</u>
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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

63. 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Transforming Strategy into Action: The Balanced Scorecard

64. A firm pursuing a strategy based on customization and variety will tend to structure and manage its supply chain to accommodate more _____ 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Operations Strategy

65. 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Mission and Strategies

66. 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 _____ becoming _____ 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

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: Mission and Strategies

67. For firms competing in worldwide markets, conducting _____ 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.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-03 Define the term strategy and explain why strategy is important.

Topic Area: Mission and Strategies

68. 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

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Implications of Organization Strategy for Operations Management

69. _____ is generally used to facilitate an organization strategy that emphasizes low cost.

- A. Speed to market
- B. Flexibility
- C. Customization
- D. Sustainability
- E.** None of the above

All of these would actually lead to higher costs.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Easy

Learning Objective: 02-04 Discuss and compare organization strategy and operations strategy; and explain why it is important to link the two.

Topic Area: Implications of Organization Strategy for Operations Management

70. 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. none of the above

More inexperienced workers tend to be less productive.

AACSB: Reflective Thinking

Bloom's: Remember

Difficulty: Medium

Learning Objective: 02-07 Provide some of the reasons for poor productivity and some ways of improving it.

Topic Area: Factors that Affect Productivity

71. Suppose a country's productivity last year was 84. If this country's productivity growth rate of 5% 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.

AACSB: Analytic

Bloom's: Apply

Difficulty: Hard

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

Essay Questions

72. 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 \$1500 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 multi-factor productivity for this process?

Week	Output	# Workers	Material (ft)
1	412	6	2840
2	364	5	2550
3	392	5	2720
4	408	6	2790

$$\text{MFP}_1 = \frac{412(125)}{6(40)(16) + 2840(10) + .5(6)(40)(16) + 1500} = \frac{51500}{35660} = 1.444$$

$$\text{MFP}_2 = \frac{364(125)}{5(40)(16) + 2550(10) + .5(5)(40)(16) + 1500} = \frac{45500}{31800} = 1.431$$

$$\text{MFP}_3 = \frac{392(125)}{5(40)(16) + 2720(10) + .5(5)(40)(16) + 1500} = \frac{49000}{33500} = 1.463$$

$$\text{MFP}_4 = \frac{408(125)}{6(40)(16) + 2790(10) + .5(6)(40)(16) + 1500} = \frac{51000}{35160} = 1.451$$

$$\text{Avg.} = (1.444 + 1.431 + 1.463 + 1.451) \div 4 = 5.789 \div 4 = 1.447$$

Feedback: Calculate the weekly multi-factor productivities and then average.

AACSB: Analytic

Bloom's: Apply

Difficulty: Hard

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity

73. A company has introduced a process improvement that reduces processing time for each unit, so that output is increased by 25% with less material, but one additional worker 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?

$$\text{Before: } \frac{60(31)}{5(12) + 60(16) + 1.6(5)(12)} = \frac{1860 \text{ hr}}{1116 \text{ hr}} = 1.667$$

$$\text{After: } \frac{60(1.25)(31)}{6(12) + 75(10) + 1.6(6)(12)} = \frac{2325 \text{ hr}}{937.2 \text{ hr}} = 2.481$$

$$\text{Productivity Increase} = \frac{(2.481 - 1.667) \times 100\%}{1.667} = 48.83\%$$

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

AACSB: Analytic

Bloom's: Apply

Difficulty: Hard

Learning Objective: 02-06 Define the term productivity and explain why it is important to organizations and to countries.

Topic Area: Productivity