

CHAPTER 2

TOTAL QUALITY IN ORGANIZATIONS

TRUE/FALSE QUESTIONS

1. In managing for quality, it is better to analyze systems by looking at their individual parts than to analyze the interaction between parts of the system.
Answer: F
AACSB: Reflective Thinking Skills
2. Market research and active solicitation of customer feedback are necessary for developing quality products.
Answer: T
AACSB: Reflective Thinking Skills
3. Russell Ackoff concluded that management should focus on the actions of parts taken separately rather than the interactions of parts and of the system with other systems.
Answer: F
AACSB: Analytic Skills
4. Overengineering can also create a complacency that leads to poor quality.
Answer: T
AACSB: Reflective Thinking Skills
5. Low-cost procurement is the primary responsibility of the purchasing agent.
Answer: F
AACSB: Reflective Thinking Skills
6. The primary objective of inspection is to remove defective items.
Answer: F
AACSB: Reflective Thinking Skills
7. Many companies now require that their suppliers provide proof that their processes can consistently turn out products of specified quality.
Answer: T
AACSB: Analytic Skills
8. The quality of incoming materials and parts becomes more critical as the use of flexible automation increases.
Answer: T
AACSB: Reflective Thinking Skills
9. Logistics activities protect quality after goods are produced.
Answer: T
AACSB: Analytic Skills

10. A service can be defined as any primary or complementary activity that does not directly produce a physical product.
Answer: T
AACSB: Analytic Skills
11. The production of services typically requires a lesser degree of customization than does manufacturing.
Answer: F
AACSB: Reflective Thinking Skills
12. The definitions of quality as applied to manufacturing do not apply well to services.
Answer: F
AACSB: Reflective Thinking Skills
13. Generally, output uniformity is as important in a manufacturing process as in a service activity.
Answer: F
AACSB: Analytic Skills
14. The high volume of customer interactions increases the probability of error in service transactions.
Answer: T
AACSB: Analytic Skills
15. Customers are commonly involved in the delivery of the service process by being present when the service is being performed.
Answer: T
AACSB: Analytic Skills
16. Studies indicate that variation in health care practices has been eliminated as a quality concern in the delivery of care.
Answer: F
AACSB: Analytic Skills
17. CQI (continuous quality improvement) is yet to be mandated as a requirement for health care organizations desiring accreditation by The Joint Commission on Accreditation of Healthcare Organizations.
Answer: F
AACSB: Analytic Skills
18. “Educational opportunity is for all students” is one of the core values of Pearl River School District’s (PRSD) quality approach.
Answer: F
AACSB: Analytic Skills

19. During the Clinton administration, efforts toward the advancement of quality in the federal government was discontinued.

Answer: T

AACSB: Analytic Skills

20. The President's Quality Award is the (U.S.) federal government's equivalent of the Malcolm Baldrige National Quality Award.

Answer: T

AACSB: Analytic Skills

MULTIPLE CHOICE QUESTIONS

1. By the 1990s, many manufacturers discovered that _____ is as critical to retaining customers as the tangible products they buy, and turned attention to such support processes as order entry, delivery, and complaint response.

- a. service quality
- b. systems thinking
- c. perceived value
- d. inventory management

Answer: a

AACSB: Analytic Skills

2. _____—a form of team participation—were developed in the late 1970s at several Department of Defense installations, such as the Norfolk Naval Shipyard and the Cherry Point Naval Air Station.

- a. Systems thinking
- b. Continuous improvement
- c. The Golden Hammer
- d. Quality circle programs

Answer: d

AACSB: Analytic Skills

3. Continuous improvement is evaluated using four processes. Which of the following is NOT one of them?

- a. The Performance Appraisal Review Process
- b. The Comprehensive Local Employment Program
- c. The Performance Measurement System
- d. Surveys and committee evaluations

Answer: b

AACSB: Analytic Skills

4. Viewing a McDonald's restaurant as being composed of order taking/cashier, grilling and food preparation, drive-through, purchasing, and training processes is an example of:

- a. just-in-time control.
- b. systems thinking.
- c. resource alignment.
- d. functional analysis.

Answer: b

AACSB: Analytic Skills

5. In a typical manufacturing system, which of the following will be the responsibility of the Purchasing and Receiving department?

- a. Installation and service
- b. Industrial engineering and process design
- c. Tool engineering
- d. Production planning and scheduling

Answer: d

AACSB: Analytic Skills

6. Systems thinking:

- a. has yet to be viewed as an important aspect in the managing for quality.
- b. has been determined to be an unimportant aspect in the managing for quality.
- c. is viewed as an important aspect in the managing for quality.
- d. is a controversial topic among quality management professionals.

Answer: c

AACSB: Analytic Skills

7. Systems thinking can be applied to the analysis of:

- a. manufacturing processes but not service processes.
- b. service processes but not manufacturing processes.
- c. both manufacturing and service processes.
- d. manufacturing processes in engineering industries only.

Answer: c

AACSB: Analytic Skills

8. Which of the following is NOT a leading quality management practice in purchasing and receiving?

- a. Selecting a supplier who bids the lowest price on a supply contract
- b. Training suppliers in quality improvement methodology
- c. Retaining suppliers that meet expectations for superior quality
- d. Requiring suppliers to provide proof of capable processes

Answer: a

AACSB: Analytic Skills

9. The purchasing department can help a firm achieve quality by following all of the following EXCEPT:

- a. selecting quality-conscious suppliers.
- b. informing suppliers of any problems encountered with their goods.
- c. establishing ad-hoc supplier relationships based on requirements.

d. providing quality-improvement training to suppliers.

Answer: c

AACSB: Reflective Thinking Skills

10. _____ requires that inventories be reduced to the barest minimum.

- a. Six Sigma
- b. Just-in-time
- c. Production scheduling
- d. Systems view

Answer: b

AACSB: Reflective Thinking Skills

11. A _____ specifies long-term and short-term production requirements for filling customer orders and meeting anticipated demand.

- a. quality forecast
- b. vision statement
- c. production plan
- d. capacity planning

Answer: c

AACSB: Analytic Skills

12. The North American Industry Classification System (NAICS) classifies _____ to include all nonmanufacturing organizations except such industries as agriculture, mining, and construction.

- a. emerging markets
- b. service organizations
- c. marginal industries
- d. value-added industries

Answer: b

AACSB: Analytic Skills

13. The service sector began to recognize the importance of quality several years after manufacturing had done so for all the following reasons EXCEPT:

- a. services did not confront the same aggressive foreign competition that manufacturing faced.
- b. high turnover rate in service industry jobs.
- c. constantly changing personnel.
- d. the very nature of quality changed from achieving customer satisfaction to a focus on product defects.

Answer: d

AACSB: Reflective Thinking Skills

14. In a service offering, managing intangible quality characteristics is more difficult, because they usually depend on:

- a. convenience of the customer.
- b. employee performance and behavior.

- c. unwritten guidelines based on past experiences.
- d. mutual understanding between the customer and the employee.

Answer: b

AACSB: Reflective Thinking Skills

15. The two most important drivers of service quality are _____ and _____.
- a. time; convenience
 - b. people; technology
 - c. satisfaction; feedback
 - d. expectation; actual delivery

Answer: b

AACSB: Analytic Skills

16. Many service companies act on the motto:
- a. "If we take care of our workforce, they will take care of our customers."
 - b. "Live life to the fullest."
 - c. "Small service is true service, while it lasts."
 - d. "Unwilling service earns no thanks."

Answer: a

AACSB: Analytic Skills

17. The largest impact of information technology for service has been in:
- a. e-commerce.
 - b. automated billing.
 - c. order tracking.
 - d. managing the rewards system.

Answer: a

AACSB: Analytic Skills

18. A 1998 study by the President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry noted several types of quality problems in health care. They include all of the following EXCEPT:
- a. unavoidable errors.
 - b. underutilization of services.
 - c. overuse of services.
 - d. variation in services.

Answer: a

AACSB: Analytic Skills

19. In 2000, the Institute of Medicine (IOM) issued a report which showed that the majority of medical errors do not result from recklessness, but are caused by:
- a. underqualified service providers.
 - b. lack of proper training.
 - c. faulty systems and processes.
 - d. major technical glitches.

Answer: c

AACSB: Analytic Skills

20. The _____ was established during the 1980s within the U.S. Office of Personnel Management in Washington, D.C., as the “primary source of leadership, information, and consulting services on quality management in the federal government.”

- a. Federal Quality Institute (FQI)
- b. President’s Quality Award (PQA)
- c. American Society for Quality (ASQ)
- d. National Committee for Quality Assurance (NCQA)

Answer: a

AACSB: Analytic Skills

21. Category Two awards of the President's Quality Award is given:

- a. for a specific practice, falling under one of the five government-wide Management Initiatives, that is innovative and exemplary.
- b. for agency performance in non-Government management initiatives, that is innovative and exemplary.
- c. for agency performance in one of the five Government-wide Management Initiatives.
- d. for agency performance in integrating their management systems under the five Government-wide Management Initiatives.

Answer: b

AACSB: Analytic Skills

22. Which of the following does NOT belong to the management initiatives in the category two and three awards?

- a. Budget and Performance Integration
- b. Comparative Outsourcing
- c. Improved Financial Performance
- d. Expanded Electronic Government

Answer: b

AACSB: Analytic Skills

23. _____ products fail as they do not meet customer needs and _____ products may not find a profitable market.

- a. Underengineered; overengineered
- b. Consumer; industrial
- c. Domestic; global
- d. Essential; luxury

Answer: a

AACSB: Reflective Thinking Skills

24. _____ concentrate on empowering employees to collect and analyze data, make critical operations decisions, and take responsibility for continuous improvements,

thereby moving the responsibility for quality from the quality control department onto the factory floor.

- a. Operations planning and scheduling systems
- b. Task scheduling systems
- c. Scientific management principles
- d. Workforce management practices

Answer: d

AACSB: Analytic Skills

25. _____ can help to prevent manufacturing defects and service errors and to reduce the need for the non-value-adding inspection practices.

- a. Management control
- b. Tighter supervision
- c. Good design
- d. Efficient supply systems

Answer: c

AACSB: Analytic Skills

26. To maintain production, the quality of materials must be high because no buffer inventories are available to take up the slack. This is especially TRUE in the case of:

- a. industrial engineering and product design.
- b. quality assurance.
- c. workforce management practices.
- d. just-in-time scheduling.

Answer: d

AACSB: Reflective Thinking Skills

27. _____ works with product designing to develop realistic specifications.

- a. The quality assurance department
- b. Industrial engineering and process designing
- c. Operations planning and scheduling
- d. The product development team

Answer: b

AACSB: Analytic Skills

28. If quality is built into the product properly, _____ should be unnecessary.

- a. inspection
- b. customer service
- c. process scheduling
- d. workforce training

Answer: a

AACSB: Analytic Skills

29. Which of the following best describes logistics activities?
- a. Burn-in testing
 - b. Preventive maintenance
 - c. Packing, shipping, and warehousing
 - d. Inspection of work-in-process
- Answer: c
AACSB: Analytic Skills
30. Which of the following are considered to be two critical components of quality systems in service industries?
- a. Information systems and technical standards
 - b. Employees and information systems
 - c. Production equipment and employees
 - d. Employees and inspection processes
- Answer: b
AACSB: Analytic Skills
31. The phrase “continuous quality improvement” (CQI) is the preferred term for quality-related efforts in which industry?
- a. Health care
 - b. Education
 - c. Automotive
 - d. Education
- Answer: a
AACSB: Analytic Skills
32. Which of the following usually is NOT a primary concern of the engineering function?
- a. Tool maintenance
 - b. Supply systems
 - c. Product specifications
 - d. Assembly layout
- Answer: b
AACSB: Reflective Thinking Skills
33. Which of the following best describes the role of a quality assurance department in an organization?
- a. Provide guidance and support for total quality efforts
 - b. Perform incoming and outgoing inspections
 - c. Find qualified, reliable suppliers
 - d. Assure total quality in the organization
- Answer: a
AACSB: Reflective Thinking Skills
34. The quality of incoming parts and materials for a manufacturing firm has become more critical with the introduction of:

- a. Automation.
- b. Just-in-time scheduling.
- c. Quality awards.
- d. Information technology.

Answer: b

AACSB: Analytic Skills

35. Measuring quality in service industries is considered more difficult than in manufacturing industries because:

- a. services cannot be analyzed as production systems.
- b. a productivity measure cannot be developed for services.
- c. customers are more involved in manufacturing industries.
- d. the outputs are less tangible.

Answer: d

AACSB: Reflective Thinking Skills

36. Services differ from manufactured goods in which of the following ways?

- a. Service output is more easily measured.
- b. Services tend to be produced and consumed simultaneously.
- c. Service output is generally more tangible.
- d. Service providing requires a lower degree of customization than does manufacturing.

Answer: b

AACSB: Reflective Thinking Skills

37. An increasingly important component in quality for service firms is:

- a. information technology.
- b. worker health care.
- c. legal services.
- d. inventory management.

Answer: a

AACSB: Analytic Skills

38. Which of the following is NOT TRUE regarding front-line employees in service firms?

- a. They receive the lowest pay.
- b. They receive the most training.
- c. They have the most contact with customers.
- d. They have little decision-making authority.

Answer: b

AACSB: Analytic Skills

39. Conditions that facilitate high quality service employees include:

- a. reward systems that recognize cost-cutting behaviors.
- b. work environments that isolate employees from customers.
- c. supervisors who act more as coaches and mentors than as administrators.
- d. specialized job assignments such as greeting customers.

Answer: c

AACSB: Reflective Thinking Skills

40. Services are generally _____ intensive, whereas manufacturing is more _____ intensive.
- a. labor, equipment
 - b. quality, quantity
 - c. input, output
 - d. profit, cost

Answer: a

AACSB: Analytic Skills

41. Which of the following is NOT TRUE regarding service quality?
- a. Output of services is generally more intangible than manufacturing output.
 - b. Quality is more easily measured in manufacturing than in service operations.
 - c. The timing of product manufacturing is more important than on-time service delivery.
 - d. Services are generally more labor intensive than manufacturing processes.

Answer: c

AACSB: Reflective Thinking Skills

42. Which of the following is NOT TRUE about service organizations?
- a. Customers often are involved in the service process.
 - b. Services are capital intensive.
 - c. Services cannot be stored, inventoried, or inspected prior to delivery.
 - d. Services are produced and consumed simultaneously.

Answer: b

AACSB: Analytic Skills

43. FedEx often handles several million shipments across the globe each day. What unique challenge does this example signify?
- a. A large number of opportunities for error
 - b. The need to store large amounts of perishable inventory
 - c. An inability to define and measure quality
 - d. Customers being present and involved in the service process

Answer: a

AACSB: Analytic Skills

44. Quality improvement efforts in health care have resulted in all of the following EXCEPT:
- a. cost reduction.
 - b. relaxation of accreditation standards.
 - c. increased efficiency.
 - d. shorter hospital stays.

Answer: b

AACSB: Reflective Thinking Skills

45. Two organizations that have advanced the quality of health care in the U.S. are:
- a. TQM and USDA.
 - b. NCQA and JCAHO.
 - c. MCO and HMO.
 - d. CQI and ASQ.

Answer: b

AACSB: Analytic Skills

46. The purposes of final product inspection are all of the following EXCEPT:
- a. to allow other workers to concentrate on output quantity rather than quality.
 - b. to ensure that no defective items reach the customer.
 - c. to discover and help resolve production problems.
 - d. to judge the quality of manufacturing.

Answer: a

AACSB: Analytic Skills

47. Common characteristics of small businesses that hinder the implementation of TQ principles include all of the following EXCEPT:
- a. little focus on the customers.
 - b. little employee discretion and empowerment.
 - c. lack of a structured information system.
 - d. lack of professional management expertise.

Answer: a

AACSB: Reflective Thinking Skills

48. The American Society for Quality has long promoted a successful program for improving the quality of elementary school education called:
- a. Learning Children.
 - b. Early Achievers.
 - c. Koalaty Kid.
 - d. E-learning.

Answer: c

AACSB: Analytic Skills

49. A study by the American Society for Quality revealed that:
- a. elementary schools are more advanced than secondary schools in their use of quality tools and approaches.
 - b. secondary schools are more advanced than elementary schools in their use of quality tools and approaches.
 - c. secondary schools are equally advanced as elementary schools in their use of quality tools and approaches.
 - d. elementary schools and secondary schools lag behind higher education institutions in their use of quality tools and approaches.

Answer: a

AACSB: Analytic Skills

50. The first institution of higher education to win the Baldrige Award is:
- a. Penn State University
 - b. University of Wisconsin - Stout
 - c. Harvard University
 - d. University of California - Fullerton
- Answer: b
AACSB: Analytic Skills
51. The one Total Quality principle that generally is well addressed in small businesses is:
- a. process orientation.
 - b. continuous improvement.
 - c. teamwork and participation
 - d. focus on customers
- Answer: d
AACSB: Reflective Thinking Skills
52. A well-documented example of a successful city-level quality initiative involved the city of:
- a. Madison, Wisconsin.
 - b. New Orleans, Louisiana.
 - c. Detroit, Michigan.
 - d. Cincinnati, Ohio.
- Answer: a
AACSB: Analytic Skills
53. The Federal Quality Institute was established within the U.S. Office of Personnel Management to:
- a. regulate implementation of ISO 9000 standards.
 - b. facilitate the use of quality management practices in the federal government.
 - c. monitor quality in third-world nations.
 - d. administer the Malcolm Baldrige National Quality Award.
- Answer: b
AACSB: Analytic Skills
54. The President's Quality Award was:
- a. revised after 2000.
 - b. eliminated in 2000.
 - c. initiated in 2000.
 - d. suspended in 2000 and reinstated in 2004.
- Answer: a
AACSB: Analytic Skills
55. The _____ is an integral part of the government's plan to improve health care quality and safety.
- a. Institute of Medicine (IOM)

- b. The National Committee for Quality Assurance (NCQA)
- c. Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
- d. Agency for Healthcare Research and Quality (AHRQ)

Answer: d

AACSB: Analytic Skills

56. _____ systems allow doctors to type medical orders, prescriptions, diagnostic tests, and blood work results into a central database.

- a. Electronic medical record (EMR)
- b. Electro cardio graph (ECG)
- c. Centralized information
- d. Directory information

Answer: a

AACSB: Analytic Skills

57. The transition to a customer-driven organization has caused fundamental changes in manufacturing practices. Identify which of the following is NOT one of the changes.

- a. Suppliers have become partners in product design and manufacturing efforts.
- b. Product design activities now closely integrate marketing, engineering, and manufacturing operations.
- c. Quality control has shifted from the production floor to the quality department.
- d. Workforce management practices concentrate on empowering employee.

Answer: c

AACSB: Reflective Thinking Skills

58. Which of the following is NOT one of the responsibilities of marketing and sales functions in today's organizations?

- a. Obtaining feedback on product performance from customers and conveying this information to product designers and engineers
- b. Procuring talent to serve specific markets
- c. Learning the products and product features that consumers want
- d. Knowing the prices that consumers are willing to pay for quality products

Answer: b

AACSB: Reflective Thinking Skills

59. The _____ department is the link between purchasing and production.

- a. liaison
- b. materials
- c. receiving
- d. supply

Answer: c

AACSB: Reflective Thinking Skills

60. The goals of _____ are to help member organizations improve their performance and maximize their effectiveness; reshape the relationship with members of The Higher Learning Commission into a partnership; and provide the public with credible quality assurance concerning higher education providers.
- a. Pearl River School District (PRSD)
 - b. Continuous Improvement Process (CIP)
 - c. Academic Quality Improvement Project (AQIP)
 - d. The National Committee for Quality Assurance (NCQA)
- Answer: c
AACSB: Analytic Skills
61. Which of the following is NOT TRUE regarding Academic Quality Improvement Project (AQIP)?
- a. Applies TQ principles to educational institutions to better understand their key processes
 - b. Involves faculty more directly in the improvement process
 - c. Provides concrete feedback to enable institutions to raise performance levels
 - d. Mandates participation in AQIP along with the academic accreditation
- Answer: d
AACSB: Analytic Skills
62. Which of the following TQ principles is generally better addressed by small businesses?
- a. Customer relationship practices
 - b. Employee engagement
 - c. Process focus
 - d. Continuous improvement
- Answer: a
AACSB: Analytic Skills
63. Which of the following is NOT a characteristic that adversely affects the implementation of TQ principles in small firms?
- a. The lack of market clout
 - b. Not recognizing the importance of human resource management strategies in quality
 - c. Lack of professional management expertise and the short-term focus
 - d. The formal nature of communication and presence of structured information systems
- Answer: d
AACSB: Reflective Thinking Skills
64. Among the key challenges that not-for-profits face in adopting quality practices are all of the following EXCEPT:
- a. overcoming the fear of change.
 - b. understanding target customers.
 - c. dealing with limited resources.

d. understanding relationships with government and large corporations.

Answer: b

AACSB: Reflective Thinking Skills

65. Which of the following is NOT a core value in Pearl River School District's (PRSD) quality approach?
- a. Active involvement from all stakeholders is integral to district operations.
 - b. Students are highly valued resources.
 - c. The district recognizes the value it has in the community and the people it serves.
 - d. Our business operations are cost-effective while maintaining quality and protecting program.

Answer: b

AACSB: Analytic Skills

66. In 2002, President Bush signed into law the _____, which demanded accountability for results, tracking each student's accomplishments, and emphasizing teaching methods that have been proven to work.
- a. No Child Left Behind Act
 - b. Educate America Act
 - c. Elementary and Secondary Education Act
 - d. Higher Education Opportunity Act

Answer: a

AACSB: Analytic Skills

67. The key factors that make Koalaty Kid work are all of the following EXCEPT:
- a. active involvement of the whole school community.
 - b. committed leadership.
 - c. a system to maintain the status quo structure.
 - d. an environment that celebrates successes.

Answer: c

AACSB: Analytic Skills

68. The _____ began accrediting managed care organizations (MCOs) in 1991 in response to the need for standardized, objective information about the quality of these organizations.
- a. Institute for Healthcare Improvement (IHI)
 - b. Institute of Medicine (IOM)
 - c. The National Committee for Quality Assurance (NCQA)
 - d. Agency for Healthcare Research and Quality (AHRQ)

Answer: c

AACSB: Analytic Skills

ESSAY QUESTIONS

1. Identify three human resource practices that can impede customer service employees from delivering high quality service. Describe how you would modify each practice to promote high quality service.

Answer: Human resource practices that impede high quality service include low pay standards, minimal training, little decision-making authority, and little responsibility. High quality service employees require systems that align with customer-focused behaviors, including reward systems that recognize customer satisfaction results, appropriate training to develop skills and abilities to perform the job, and supervisors who act like mentors and coaches rather than administrators.

AACSB: Reflective Thinking Skills

2. Discuss the role of the purchasing department of a manufacturing firm in achieving quality.

Answer: Purchasing's role is critical to the achievement of quality because of the purchasing department's influence over input quality. Some examples of the purchasing department's contribution include selecting quality-conscious suppliers, organizing technical staffs from the buyer and supplier to co-design products and solve technical problems, and providing quality improvement training to suppliers. The text lists a number of other possibilities. Check page 53 for details.

AACSB: Reflective Thinking Skills

3. Discuss the role of the marketing department of a manufacturing firm in achieving quality.

Answer: The marketing department's role is critical to the achievement of quality because it is responsible for determining the needs and expectations of the customer. In this way, marketing goes beyond its traditional role of advertising and sales to provide critical information of customer needs and preferences to the designers and engineers of the firm.

AACSB: Reflective Thinking Skills

4. Identify and discuss five differences between service and manufacturing organizations.

Answer: Differences include difficulty to identify and measure customer needs and performance standards in services, intangible output in services, simultaneous production and consumption in services, customer involvement in many service operations, more labor intensity in services, and high numbers of transactions in service operations.

AACSB: Reflective Thinking Skills

5. Discuss how front-line employees are critical to customer assessment of service quality. Identify the challenges faced by front-line employees.

Answer: Front-line employees are critical given they provide the human contact between the customer and service organization. Although these employees are critical in the assessment of service quality by the customer and represent the firm to the customer, they are typically low-paid, lack sufficient training, and possess little decision-making authority.

AACSB: Reflective Thinking Skills

6. Discuss the importance of employees and information technology in the delivery of service quality. Use two examples of service firms to help support your discussion.

Answer: Answers should describe the role of employees in contacting and communicating with the customers, as well as having the authority (empowerment) to handle customer issues. The role of information technology should be discussed around the high volume of information that is available and the customer's desire to have quick access to the information. Firms used for examples should stress and further elaborate these points.

AACSB: Reflective Thinking Skills

7. Select four major functions of a manufacturing firm and describe how each function contributes to the firm's achievement of quality.

Answer: The text lists the various functions that comprise the manufacturing firm. The respondent can choose from such functions as production planning and scheduling, manufacturing and assembly, industrial engineering and process design, and finance/accounting, among others.

AACSB: Reflective Thinking Skills

8. Describe three initiatives that have been aimed at improving quality in the educational institutions.

Answer: Examples include Koalaty Kid, The Pearl River School District (PRSD) quality approach, and AQIP.

AACSB: Business Knowledge and Analytic Skills

9. Cite three trends that support the improvement of quality in the health care sector.

Answer: Trends include an increased percentage of health care organizations using quality criterion for senior management compensation, more organizations using customer satisfaction as a primary criterion in strategic planning, an increase in employee-based quality-improvement teams, and accreditation standards that incorporate quality improvement principles.

AACSB: Business Knowledge and Analytic Skills

10. Cite three ways that a hotel can use information technology to improve service quality.

Answer: Responses might include ways to speed service, improve accuracy, and surprise customers with delightful service levels—all critical dimensions of effective quality provision in the hotel industry context.

AACSB: Reflective Thinking Skills

11. Cite two ways that the accounting function can contribute to the achievement of quality.

Answer: Accounting contributions include measurement systems that track cost of quality and waste throughout the company, use of budgeting procedures that facilitate long term views and prevention rather than myopic, short term planning and control, and practice of quality improvement techniques such as control charting of performance (e.g., days required to report quarterly operating performance).

AACSB: Reflective Thinking Skills

12. Identify two key components of service system quality. Explain why these components are particularly important to service system quality (when compared to manufacturing system quality).

Answer: Two key components are employees and information technology. These components are particularly important to service system quality due to the basic differences in service systems, such as instantaneous consumption of output and significant customer involvement in service transactions. These unique dimensions of service operations demand highly competent service personnel supported by fast, accurate, thorough information technology.

AACSB: Reflective Thinking Skills

13. Explain the differences between measuring quality of a manufactured product and quality of a service.

Answer: Product quality is conducive to direct measurement by means such as conformance to specification. Because services are intangible and difficult to measure, quality must usually be measured indirectly, using such means as asking customers for their perceptions, or by utilizing some service process measures (such as time to fill an order) to infer service quality.

AACSB: Reflective Thinking Skills

14. Describe three business support functions for manufacturing and explain how these functions contribute to achievement of quality.

Answer: The respondent can select from many of the functions listed in the text that support the manufacturing function including product design and engineering, finance and accounting, purchasing and receiving, production planning and scheduling, and others.

AACSB: Reflective Thinking Skills

15. Cite three types of quality problems in health care. Recommend three ways to improve health care delivery.

Answer: The text cites a 1998 study that found avoidable errors, underutilization of services, overuse of services, and variation in services as common types of health care quality problems. Twelve recommendations from this same study are cited by the text including: establishment of national aims for improving health care quality, identifying core sets of quality measures for each health care sector, disseminating reliable information on health care quality to consumers, and commitment to reduce error and improve safety, among others.

AACSB: Reflective Thinking Skills

CASE QUESTIONS

1. A significant feature of lean production is the practice of _____ by every worker, demanding the questioning of every process and testing of all assumptions.
- continuous improvement
 - multitasking
 - process mapping
 - self-improvement

Answer: a

AACSB: Reflective Thinking Skills

2. The Rakuraku seat is a:
- position in the Japanese strategy management game called Rakuraku where the other players team up to oust the incumbent manager.
 - title conferred on new Japanese managers who take on the position of intern to a senior manager.
 - quality initiative whereby one person is positioned as the Rakuraku seat which oversees quality within respective teams.
 - comfortable work chair mounted on the tip of an arm that allows a line worker to easily get into and out of cramped car-body interiors.

Answer: d

AACSB: Reflective Thinking Skills

3. One popular phrase at Toyota is:
- if there's a problem, there's a solution.*
 - don't fix what's not broken.*
 - change or die.*
 - better late than never.*

Answer: c

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