Chapter 2 - Foundations of Quality Management

1. Deming laid out a "quality improvement program" for companies such as Ford, GM, and Procter & Gamble, when invited to work with them to improve their quality.
   a. True
   b. False

   ANSWER: False
   DIFFICULTY: Difficulty: Easy
   ACCREDITING STANDARDS: BUSPROG: Analytic
   DISC: Operations Management
   TOPICS: DESC.EVAB.17.02.01 The Deming Philosophy
   KEYWORDS: Bloom's: Knowledge

2. Unlike other management gurus and consultants, Deming defined and described quality precisely.
   a. True
   b. False

   ANSWER: False
   DIFFICULTY: Difficulty: Easy
   ACCREDITING STANDARDS: BUSPROG: Analytic
   DISC: Operations Management
   TOPICS: DESC.EVAB.17.02.01 The Deming Philosophy
   KEYWORDS: Bloom's: Knowledge

3. Deming stressed that the highest levels of operational staff in an organization must assume the overriding responsibility for quality management.
   a. True
   b. False

   ANSWER: True
   DIFFICULTY: Difficulty: Moderate
   ACCREDITING STANDARDS: BUSPROG: Analytic
   DISC: Operations Management
   TOPICS: DESC.EVAB.17.02.01 The Deming Philosophy
   KEYWORDS: Bloom's: Knowledge

4. Improvements in operations are achieved by reducing the causes and impacts of variation.
   a. True
   b. False

   ANSWER: True
   DIFFICULTY: Difficulty: Easy
   ACCREDITING STANDARDS: BUSPROG: Analytic
   DISC: Operations Management
   TOPICS: DESC.EVAB.17.02.01 The Deming Philosophy
   KEYWORDS: Bloom's: Knowledge

5. Deming emphasized that knowledge is not possible without theory, and experience alone does not establish a theory.
   a. True
   b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.01 The Deming Philosophy
KEYWORDS:	Bloom's: Knowledge

6. Unlike Deming, however, Juran proposed a major cultural change in the organization, and did not take up improving quality by working within the system familiar to managers.
   a. True
   b. False

ANSWER:	False
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.02 The Juran Philosophy
KEYWORDS:	Bloom's: Knowledge

7. Juran advocated the use of quality cost accounting and analysis to focus attention on quality problems.
   a. True
   b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.02 The Juran Philosophy
KEYWORDS:	Bloom's: Knowledge

8. Juran agreed with Deming’s policy which stated that fear can bring out the best in people.
   a. True
   b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.02 The Juran Philosophy
KEYWORDS:	Bloom's: Knowledge

9. According to Crosby, quality is judged solely on whether requirements have been met, and nonconformance is the absence of quality.
   a. True
   b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.03 The Crosby Philosophy
KEYWORDS:	Bloom's: Knowledge

10. Crosby’s philosophy demonstrates that quality management practices will not save, but cost money.
    a. True
    b. False

ANSWER:	False
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.03 The Crosby Philosophy
KEYWORDS:	Bloom's: Knowledge

11. Dr. Kaoru Ishikawa, a quality philosopher, is best known for coining the phrase, "total quality control."
    a. True
    b. False

ANSWER:	False
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.04 Other Quality Philosophers
KEYWORDS:	Bloom's: Knowledge

12. A. V. Feigenbaum, a quality philosopher, promoted the use of quality costs as a measurement and evaluation tool.
    a. True
    b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.04 Other Quality Philosophers
KEYWORDS:	Bloom's: Knowledge

13. Dr. Kaoru Ishikawa, a quality philosopher, advocated collecting and analyzing factual data using simple visual tools, statistical techniques, and teamwork as the foundations for implementing total quality.
    a. True
    b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.04 Other Quality Philosophers
KEYWORDS:	Bloom's: Knowledge

14. According to Dr. Ishikawa's philosophy, data with dispersion information are false data.
    a. True
    b. False

ANSWER:	False
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.04 Other Quality Philosophers
KEYWORDS:	Bloom's: Knowledge

15. According to Dr. Ishikawa's philosophy, the ideal state of quality control occurs when inspection becomes necessary.
    a. True
    b. False

ANSWER:	False
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.04 Other Quality Philosophers
KEYWORDS:	Bloom's: Knowledge

16. The total quality philosophy was initially based on only one principle—customer focus.
    a. True
    b. False

ANSWER:	False
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.05 Principles, Practices, and Techniques of Quality Management
KEYWORDS:	Bloom's: Knowledge

17. One of the most important quality management techniques is basic statistics.
    a. True
    b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.05 Principles, Practices, and Techniques of Quality Management
KEYWORDS:	Bloom's: Knowledge

18. Setting simple goals and targets is one of the practices that are used for implementing leadership as a quality management principle.
    a. True
    b. False

ANSWER:	False
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.05 Principles, Practices, and Techniques of Quality Management
KEYWORDS:	Bloom's: Knowledge

19. Variation in a production process decreases capacity utilization.
    a. True
    b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.06 Variation and Statistical Thinking
KEYWORDS:	Bloom's: Knowledge

20. Variation in a production process makes it easier to find the root cause of the process issues.
    a. True
    b. False

ANSWER:	False
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.06 Variation and Statistical Thinking
KEYWORDS:	Bloom's: Knowledge

21. Common causes of variation in a production process are a result of the design of the product and production system.
    a. True
    b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.06 Variation and Statistical Thinking
KEYWORDS:	Bloom's: Knowledge

22. Special causes of variation in a production process arise from internal sources that are inherent in the process.
    a. True
    b. False

ANSWER:	False
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.06 Variation and Statistical Thinking
KEYWORDS:	Bloom's: Knowledge

23. A quality management system represents a specific implementation of quality concepts, standards, methods, and tools, and is unique to an organization.
    a. True
    b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.07 Quality Management Systems
KEYWORDS:	Bloom's: Knowledge

24. The core of a QMS is focused on creating the goods and services that customers want.
    a. True
    b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.07 Quality Management Systems
KEYWORDS:	Bloom's: Knowledge

25. The ISO 9000:1994 series standards were intended to provide confidence to customers and other stakeholders that quality requirements are being achieved in the delivered product.
    a. True
    b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.07 Quality Management Systems
KEYWORDS:	Bloom's: Knowledge

26. The ISO 9001 requirement for audits forces an organization to review its quality system on a routine basis.
    a. True
    b. False

ANSWER:	True
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.07 Quality Management Systems
KEYWORDS:	Bloom's: Knowledge

27. Japanese scientists and Engineers established the Deming application prize in 1951 to recognize companies that show a high level of achievement in:
    a. variation of production processes.
    b. human resource policies.
    c. developing innovative products.
    d. quality practices.

ANSWER:	d
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.01 The Deming Philosophy
KEYWORDS:	Bloom's: Knowledge

28. According to Deming, a product or service possesses quality if:
    a. the production process engages more workforce.
    b. the cost of the product or service exceeds its benefit.
    c. it enjoys a sustainable market.
    d. it shows variations in its production process.

ANSWER:	c
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.01 The Deming Philosophy
KEYWORDS:	Bloom's: Knowledge

29. In Deming's view, _____is the chief culprit of poor quality.
    a. concurrent engineering
    b. variation
    c. agility of the production process
    d. low level of tolerance in manufacturing

ANSWER:	b
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.01 The Deming Philosophy
KEYWORDS:	Bloom's: Knowledge

30. The _____ theory states that improvements in quality lead to lower costs because they result in less rework, fewer mistakes, fewer delays and snags, and better use of time and materials. Lower costs, in turn, lead to productivity improvements.
    a. Quincunx
    b. Basic Elements of Improvement
    c. Absolutes of Quality Management
    d. Deming Chain Reaction

ANSWER:	d
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.01 The Deming Philosophy
KEYWORDS:	Bloom's: Knowledge

31. According to point one of Deming's 14 points for quality improvement, the responsibility of improving a firm's competitive position lies with _____.
    a. top management
    b. suppliers
    c. middle management
    d. employees

    ANSWER: a
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.01 The Deming Philosophy
    KEYWORDS: Bloom's: Knowledge

32. A company and the people in the company need to continually renew themselves to take in new approaches and relearn many older ones. This is called _____.
    a. organizational designing
    b. organizational learning
    c. organizational structuring
    d. organizational engineering

    ANSWER: b
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.01 The Deming Philosophy
    KEYWORDS: Bloom's: Knowledge

33. Deming synthesized the underlying foundations of the 14 Points of improving quality into four simple elements which are called:
    a. basic elements of improvement.
    b. absolutes of quality management.
    c. the four steps to total quality control.
    d. a system of profound knowledge.

    ANSWER: d
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.01 The Deming Philosophy
    KEYWORDS: Bloom's: Knowledge

34. Which of the following is one of the four elements of Deming's system of profound knowledge?
    a. Quality leadership
    b. Suboptimization
    c. Understanding variation
    d. Modern quality technology

    ANSWER: c
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.01 The Deming Philosophy
    KEYWORDS: Bloom's: Knowledge

35. A _____ is a set of functions or activities within an organization that work together for the aim of the organization.
    a. quincunx
    b. schema
    c. hidden factory
    d. system

    ANSWER: d
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.01 The Deming Philosophy
    KEYWORDS: Bloom's: Knowledge

36. Which of the following terms refers to a device that illustrates a natural process of variation?
    a. Hidden factory
    b. Six sigma
    c. Quincunx
    d. Balanced scorecard

    ANSWER: c
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.01 The Deming Philosophy
    KEYWORDS: Bloom's: Knowledge

37. According to Peter Scholtes, a noted consultant, when people don't understand systems:
    a. they try to resist the process of change.
    b. they are less likely to distinguish between fact and opinion.
    c. they see the symptoms but not the deep causes of problems.
    d. they don't see events as individual incidents but assume it to be the combined result of several independent forces.

ANSWER:	c
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.01 The Deming Philosophy
KEYWORDS:	Bloom's: Knowledge

38. According to Peter Scholtes, a noted consultant, when people don't understand variation:
    a. they see trends where there are none.
    b. they are more likely to distinguish between fact and opinion.
    c. they know when expectations are realistic.
    d. they don't see events as individual incidents.

ANSWER:	a
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.01 The Deming Philosophy
KEYWORDS:	Bloom's: Knowledge

39. Which of the following is the difference between Deming's and Juran's quality philosophy?
    a. Juran made top management commitment an absolute necessity.
    b. Juran sought to improve quality by working within the system familiar to managers.
    c. Juran demonstrated that quality management practices will save, not cost money.
    d. Juran viewed quality as imperative in the future competitiveness in global markets.

ANSWER:	b
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.02 The Juran Philosophy
KEYWORDS:	Bloom's: Knowledge

40. In Juran’s quality trilogy, the process of preparing to meet quality goals is called:
    a. quality planning.
    b. quality control.
    c. quality improvement.
    d. quality leadership.

    ANSWER: a
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.02 The Juran Philosophy
    KEYWORDS: Bloom's: Knowledge

41. In Juran’s quality trilogy, the process of meeting quality goals during operations is called:
    a. quality control.
    b. quality planning.
    c. quality leadership.
    d. quality improvement.

    ANSWER: a
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.02 The Juran Philosophy
    KEYWORDS: Bloom's: Knowledge

42. In Juran’s quality trilogy, the process of breaking through to unprecedented levels of performance is called:
    a. quality improvement.
    b. quality control.
    c. quality planning.
    d. quality leadership.

    ANSWER: a
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.02 The Juran Philosophy
    KEYWORDS: Bloom's: Knowledge

43. In accordance with Juran's breakthrough sequence, the path from problem to solution consists of two journeys: the journey from symptom to cause is called:
    a. remedial journey.
    b. diagnostic journey.
    c. continuous improvement.
    d. breakthrough improvement.

    ANSWER: b
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.02 The Juran Philosophy
    KEYWORDS: Bloom's: Knowledge

44. According to _____, the only performance measurement is the cost of quality, which is the expense of nonconformance and the only performance standard is "Zero Defects (ZD)."
    a. Ishikawa
    b. Juran
    c. Deming
    d. Crosby

    ANSWER: d
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.03 The Crosby Philosophy
    KEYWORDS: Bloom's: Knowledge

45. The essence of Crosby's quality philosophy is embodied in what he calls the:
    a. absolutes of quality management.
    b. the breakthrough sequence.
    c. quality trilogy.
    d. Deming chain reaction theory.

    ANSWER: a
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.03 The Crosby Philosophy
    KEYWORDS: Bloom's: Knowledge

46. Which of the following points about Crosby's absolutes of quality management is true?
    a. Doing jobs right the first time is expensive.
    b. Quality means conformance to elegance, not requirements.
    c. The only performance measurement is the cost of quality.
    d. The burden of responsibility for solving quality problems falls only on the quality department.

    ANSWER: c
    DIFFICULTY: Difficulty: Moderate
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.03 The Crosby Philosophy
    KEYWORDS: Bloom's: Knowledge

47. According to Crosby, _____ is a performance standard which involves concentrating on preventing defects rather than just finding and fixing them.
    a. zero defects
    b. continuous improvement
    c. Baldrige criteria
    d. breakthrough improvement

    ANSWER: a
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.03 The Crosby Philosophy
    KEYWORDS: Bloom's: Knowledge

48. Which of the following was one of Crosby's basic elements of improvement?
    a. Agility
    b. Variation
    c. Implementation
    d. Suboptimization

    ANSWER: c
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.03 The Crosby Philosophy
    KEYWORDS: Bloom's: Knowledge

49. Which one of the following Crosby's basic elements of improvement means that the top management must take quality improvement seriously?
    a. Determination
    b. Variation
    c. Implementation
    d. Suboptimization

    ANSWER: a
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.03 The Crosby Philosophy
    KEYWORDS: Bloom's: Knowledge

50. Feigenbaum defined the term _____ as an effective system for integrating the quality development, quality maintenance, and quality improvement efforts of the various groups in an organization so as to enable production and service at the most economical levels which allow full customer satisfaction.
    a. absolutes of quality management
    b. basic elements of improvement
    c. quality trilogy
    d. total quality control

    ANSWER: d
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.04 Other Quality Philosophers
    KEYWORDS: Bloom's: Knowledge

51. Feigenbaum popularized the term _____, which described the portion of plant capacity wasted due to poor quality.
    a. exponential distribution
    b. hidden factory
    c. quincunx
    d. quality trilogy

    ANSWER: b
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.04 Other Quality Philosophers
    KEYWORDS: Bloom's: Knowledge

52. Which of the following is one of the key elements of Dr. Ishikawa's quality philosophy?
    a. Data with dispersion information are false data.
    b. Personnel management is the entrance and exit of quality.
    c. Remove the symptoms, not the root cause.
    d. Quality begins with education and ends with education.

    ANSWER: d
    DIFFICULTY: Difficulty: Moderate
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.04 Other Quality Philosophers
    KEYWORDS: Bloom's: Knowledge

53. Who among the following influenced the development of a participative, bottom-up view of quality, which became the trademark of the Japanese approach to quality management?
    a. Joseph Juran
    b. A.V.Feigenbaum
    c. Kaoru Ishikawa
    d. Philip.B.Crosby

    ANSWER: c
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.04 Other Quality Philosophers
    KEYWORDS: Bloom's: Knowledge

54. Dr. Ishikawa is best known for developing a popular quality improvement tool called _____.
    a. u-chart
    b. process capability index
    c. histogram
    d. cause-and-effect diagram

    ANSWER: d
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.04 Other Quality Philosophers
    KEYWORDS: Bloom's: Knowledge

55. According to the characterization of total quality by James W. Dean, Jr. and David E. Bowen, _____ are considered the foundation of the quality philosophy.
    a. practices
    b. techniques
    c. principles
    d. variations

    ANSWER: c
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.05 Principles, Practices, and Techniques of Quality Management
    KEYWORDS: Bloom's: Knowledge

56. Which of the following principles supports statistical thinking, a philosophy of learning and action?
    a. Variations make it easy to understand root causes in a production process issue.
    b. Understanding and increasing variation are keys to success.
    c. Variation exists in all processes.
    d. All work occurs in a system of independent processes.

    ANSWER: c
    DIFFICULTY: Difficulty: Moderate
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.06 Variation and Statistical Thinking
    KEYWORDS: Bloom's: Knowledge

57. _____ are a result of the design of the product and production system and generally account for about 80 to 95 percent of the observed variation in the output of a production process.
    a. Remedial causes of variation
    b. Common causes of variation
    c. Assignable causes of variation
    d. Special causes of variation

    ANSWER: b
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.06 Variation and Statistical Thinking
    KEYWORDS: Bloom's: Knowledge

58. The purpose of Deming's _____ experiment is to show that people can and do affect the outcomes of many processes and create unwanted variation by "tampering" with the process, or indiscriminately trying to remove common causes of variation.
    a. red beads
    b. hidden factory
    c. quincunx
    d. funnel

    ANSWER: d
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.06 Variation and Statistical Thinking
    KEYWORDS: Bloom's: Knowledge

59. With regard to quality management systems, _____ is a formal document that demonstrates a commitment to achieving high quality and meeting customer expectations.
    a. quality policy
    b. quality memorandum
    c. quality trilogy
    d. quality minute book

    ANSWER: a
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.07 Quality Management Systems
    KEYWORDS: Bloom's: Knowledge

60. With regard to quality management systems, a quality _____ serves as a permanent reference for implementing and maintaining the system.
    a. minute book
    b. manual
    c. policy
    d. trilogy

    ANSWER: b
    DIFFICULTY: Difficulty: Easy
    ACCREDITING STANDARDS: BUSPROG: Analytic
    DISC: Operations Management
    TOPICS: DESC.EVAB.17.02.07 Quality Management Systems
    KEYWORDS: Bloom's: Knowledge

61. The first point in Deming's 14 points for improving quality is "Create a vision and demonstrate commitment." Explain this point.

ANSWER:	Create a vision and demonstrate commitment is the first point in Deming's 14 points for improving quality. An organization must define its values, mission, and vision of the future to provide long-term direction for its management and employees. Deming believed that businesses should not exist simply for profit; they are social entities whose basic purpose is to serve their customers and employees. To fulfill this purpose, they must take a long-term view, invest in innovation, education, and training, and take responsibility for providing jobs and improving a firm's competitive position. This responsibility lies with top management. Effective leadership begins with commitment, but making a commitment to quality and performance excellence is still difficult for managers. Even when managers have conducted a thorough assessment of their organization and know what they need to change, many do not effectively follow up on opportunities.4 Reasons range from denial to excuses.
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.01 The Deming Philosophy
KEYWORDS:	Bloom's: Knowledge

62. What is a quincunx?

ANSWER:	A device called a quincunx illustrates a natural process of variation. In a quincunx, small balls are dropped from a hole in the top and hit a series of pins as they fall toward collection boxes. The pins cause each ball to move randomly to the left or the right as it strikes each pin on its way down.
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.01 The Deming Philosophy
KEYWORDS:	Bloom's: Knowledge

63. List the steps taken by Japanese organizations as a result of Juran's leadership.

ANSWER:	The steps taken by Japanese organizations as a result of Juran's leadership are: 1. Directing quality from the senior management level 2. Training the entire management hierarchy in quality principles 3. Striving to improve quality at a revolutionary rate 4. Reporting progress on quality goals to executive levels 5. Involving the workforce in quality 6. Revising the reward and recognition structure to include quality
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.02 The Juran Philosophy
KEYWORDS:	Bloom's: Knowledge

64. Describe the similarities in the quality improvement philosophies of Deming, Juran, and Crosby.

ANSWER:	Despite their significant differences to implementing organizational change, the philosophies of Deming, Juran, and Crosby are more alike than different. Each views quality as imperative in the future competitiveness in global markets; makes top management commitment an absolute necessity; demonstrates that quality management practices will save, not cost money; places responsibility for quality on management, not the workers; stresses the need for continuous, never-ending improvement; acknowledges the importance of the customer and strong management/worker partnerships; and recognizes the need for and difficulties associated with changing the organizational culture.
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.03 The Crosby Philosophy
KEYWORDS:	Bloom's: Knowledge

65. Describe the three steps to quality which summarize Feigenbaum’s quality philosophy.

ANSWER:	Feigenbaum’s philosophy is summarized in his three steps to quality: 1. Quality Leadership: A continuous management emphasis is grounded on sound planning rather than reaction to failures. Management must maintain a constant focus and lead the quality effort. 2. Modern Quality Technology: The traditional quality department cannot resolve 80 percent to 90 percent of quality problems. This task requires the integration of office staff as well as engineers and shop-floor workers in the process who continually evaluate and implement new techniques to satisfy customers in the future. 3. Organizational Commitment: Continuous training and motivation of the entire workforce as well as an integration of quality in business planning indicate the importance of quality and provide the means for including it in all aspects of the firm’s activities.
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic BUSPROG: Reflective Thinking DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.04 Other Quality Philosophers
KEYWORDS:	Bloom's: Knowledge

66. Identify the contract manufacturer of precision sheet metal and machined components for telecommunications, semiconductor, and medical equipment industries, located in Garland, Texas.

a. Sears
b. KARLEE
c. ISO 9001
d. Crosby

ANSWER:	b
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.10 Quality in Practice: Bringing Quality Principles to Life at KARLEE
KEYWORDS:	Bloom's: Knowledge

67. How does KARLEE provide a vertically integrated range of services that support customers from initial component design to a finished, assembled product?
a. Advanced design engineering support
b. No prototype production
c. No manufacturing
d. Lack of value-added assembly

ANSWER:	a
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.10 Quality in Practice: Bringing Quality Principles to Life at KARLEE
KEYWORDS:	Bloom's: Knowledge

68. Which of the following companies had an annual average increase in sales growth of 35 percent from 1995 to 2000, and high levels of customer and employee satisfaction, and quality and operational performance?
a. Bloomingdale's
b. Shake Shack
c. KARLEE
d. Biltmore hotels

ANSWER:	c
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.10 Quality in Practice: Bringing Quality Principles to Life at KARLEE
KEYWORDS:	Bloom's: Knowledge

69. Which of the following is NOT one of KARLEE's principles of total quality?
    a. Customer focus
    b. Unobstructed approach
    c. Leadership
    d. Involvement of people

ANSWER:	b
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.10 Quality in Practice: Bringing Quality Principles to Life at KARLEE
KEYWORDS:	Bloom's: Knowledge

70. Briefly describe KARLEE's position on leadership.

ANSWER:	Senior Executive Leaders (SELs) and the KARLEE Leadership Committee (KLC) set the strategic direction of the company, and communicate and reinforce values and expectations through performance reviews, participation in improvement or strategic projects, regular interactions with customers and team members, and recognition of team member achievements.
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.10 Quality in Practice: Bringing Quality Principles to Life at KARLEE
KEYWORDS:	Bloom's: Knowledge

71. How do KARLEE's mutually beneficial supplier relationships work?

ANSWER:	KARLEE selects and develops suppliers that share their commitment to customer satisfaction to ensure they have the materials and services needed to support their customers. Supplier performance issues and expectations are discussed with individual suppliers and presented at the annual Supplier Symposium.
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.10 Quality in Practice: Bringing Quality Principles to Life at KARLEE
KEYWORDS:	Bloom's: Knowledge

72. KARLEE's steps of customer focus, leadership, involvement of people, process approach, system approach, continual improvement, and factual approach are collectively called the:
a. KARLEE code.
b. gold standard.
c. exemplification of principles of total quality in its business practices.
d. standards of care.

ANSWER:	c
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.10 Quality in Practice: Bringing Quality Principles to Life at KARLEE
KEYWORDS:	Bloom's: Knowledge

73. List KARLEE's three values.

ANSWER:	The three values adhered to in the KARLEE organization are: a. a systematic approach to business and performance management, b. a desire for long-term partnerships, and c. global leadership.
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.10 Quality in Practice: Bringing Quality Principles to Life at KARLEE
KEYWORDS:	Bloom's: Knowledge

74. At KARLEE, each customer is assigned a(n) that is on call 24 hours a day for day-to-day production issues.
a. technical representative
b. agent
c. three-person customer service team
d. contact

ANSWER:	c
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.10 Quality in Practice: Bringing Quality Principles to Life at KARLEE
KEYWORDS:	Bloom's: Knowledge

75. At KARLEE, the strategic direction of the company is set by .
    a. mid-level executives
    b. the president
    c. a committee
    d. SELs (Senior Executive Leaders)

ANSWER:	d
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.10 Quality in Practice: Bringing Quality Principles to Life at KARLEE
KEYWORDS:	Bloom's: Knowledge

76. By the end of 2002, all of the 32 carry in service centers of sears, Roebuck and Co., were registered to _____.
    a. ISO 9407
    b. ISO 9141
    c. ISO 9001
    d. ISO 9126

ANSWER:	c
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.11 Quality in Practice: ISO 9000 and Sears' Quality Management System
KEYWORDS:	Bloom's: Knowledge

77. What was the major hurdle faced by Sears during the implementation of ISO 9001?

ANSWER:	ISO 9001 implementation played a large role in assisting with process standardization across the company. ISO 9001 is often associated with the manufacturing industry, and one major hurdle Sears had to overcome was communicating the value of a QMS within a retail and service environment.
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.11 Quality in Practice: ISO 9000 and Sears' Quality Management System
KEYWORDS:	Bloom's: Knowledge

78. Give an example to show that ISO 9001 became a fundamental tool that provides Sears a safe base for continued improvements.

ANSWER:	ISO 9001 became a fundamental tool that provides the company a safe base for continued improvements. For example, Sears has made dramatic improvements in calibrating the tools used for repairs and service calls. Although the company had calibrated some of its tools prior to implementing ISO 9001, the standard requires 100-percent tool calibration for safety purposes. Not only does Sears have an expansive program for calibrating its tools, but it has also opened and registered its own calibration lab to ISO/IEC 17025.
DIFFICULTY:	Difficulty: Moderate
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.11 Quality in Practice: ISO 9000 and Sears' Quality Management System
KEYWORDS:	Bloom's: Knowledge

79. Give an example to show that the ISO 9001 implementation has helped Sears' efficiency in completing repairs.

ANSWER:	The ISO 9001standard helped Sears' efficiency in completing repairs. For instance, in the Chattanooga, Tennessee, carry-in facility, the average daily completion rate for repairing lawn mowers or other items doubled from four or five to eight or nine per repairman as a result of ISO 9001 implementation.
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.11 Quality in Practice: ISO 9000 and Sears' Quality Management System
KEYWORDS:	Bloom's: Knowledge

80. With regard to Quality Management System, define recall rate. Explain with an example how the technician recall rate has improved at Sears' because of the quality management system.

ANSWER:	The recall rate is the percentage of times service technicians must return to customers' homes for a second time within 30 days. Sears' district office in Houston has improved its technician recall rate because of the QMS.Before the SST, the recall rate in Houston was about 12 percent. In 2004, Houston service technicians made more than a quarter of a million service calls, with a 9.3-percent recall rate. In 2005, the rate dropped to 7.9 percent.
DIFFICULTY:	Difficulty: Easy
ACCREDITING STANDARDS:	BUSPROG: Analytic DISC: Operations Management
TOPICS:	DESC.EVAB.17.02.11 Quality in Practice: ISO 9000 and Sears' Quality Management System
KEYWORDS:	Bloom's: Knowledge