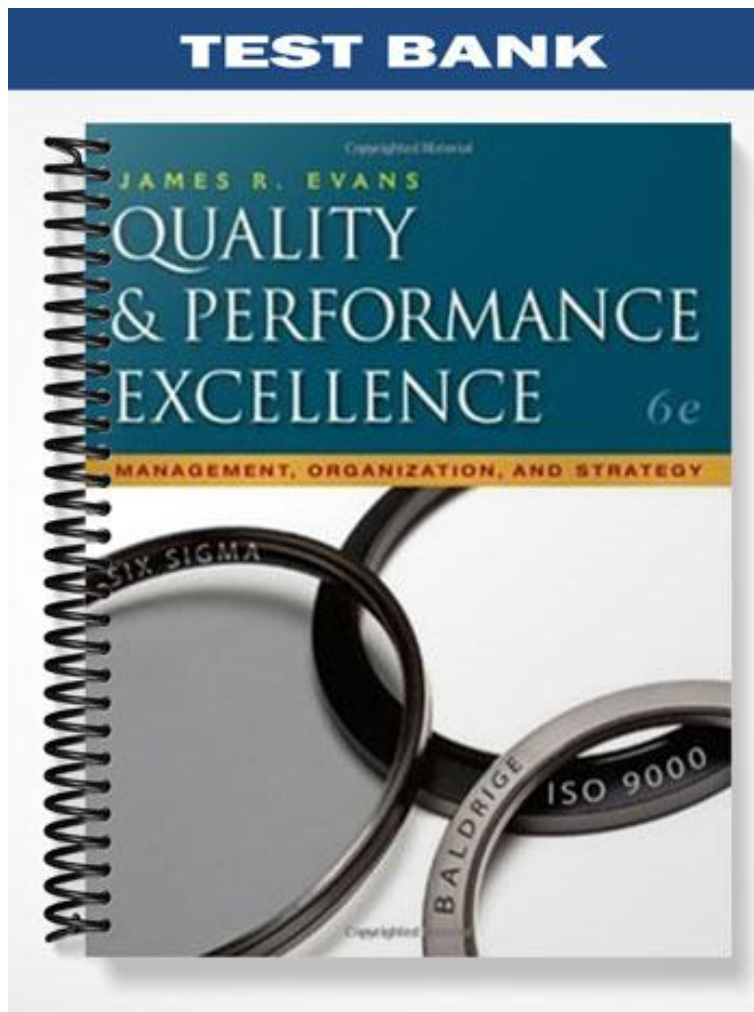


TEST BANK



CHAPTER 2
FRAMEWORKS FOR QUALITY AND PERFORMANCE EXCELLENCE

TRUE/FALSE QUESTIONS

1. Unlike other management gurus and consultants, Deming was clear and precise on his definition of quality.
Answer: False
AACSB: Analytic
Page: 49

2. In terms of variation, a bad batch of material purchased from a supplier is an example of a common cause.
Answer: False
AACSB: Analytic
Page: 50

3. A system governed only by common causes is stable and its performance can be predicted.
Answer: True
AACSB: Analytic
Page: 51

4. Deming recognized that historical methods of management built on early twentieth-century principles of Frederick Taylor were the foundations for excellence in quality.
Answer: False
AACSB: Analytic
Page: 54

5. Slogans calling for improved quality usually assume that poor quality results from a lack of motivation.
Answer: True
AACSB: Analytic
Page: 56

6. Juran advocates the accounting and analysis of quality costs to focus attention on quality problems.
Answer: True

AACSB: Analytic
Page: 57

7. According to Crosby's Absolutes of Quality Management, quality means conformance to requirements not elegance.
Answer: True
AACSB: Analytic
Page: True

8. Crosby considered Zero Defects as the only performance measurement.
Answer: False
AACSB: Analytic
Page: 59

9. The Deming Award recognizes U.S. companies that excel in quality management practice and performance.
Answer: False
AACSB: Analytic
Page: 61

10. According to the Baldrige Criteria, the Process Management category examines how an organization engages, manages, and develops its workforce to utilize its full potential in alignment with the organization's overall mission, strategy, and action plans.
Answer: False
AACSB: Analytic
Page: 64

11. Each category in the Baldrige Criteria is subdivided into: items; areas to address; approaches used; the deployment; and the results obtained.
Answer: True
AACSB: Analytic
Page: 65

12. The Baldrige Criteria is specific regarding quality tools, techniques, technologies, systems, and starting points.
Answer: False
AACSB: Analytic
Page: 66

13. In the Baldrige award evaluation process, to help examiners understand the context of the organization, applicants are required to provide a Performance Profile, which is basically a snapshot of the organization that describes the organizational environment.
Answer: False
AACSB: Analytic
Page: 66
14. Deployment refers to the extent to which the approaches are applied to all requirements of the item.
Answer: True
AACSB: Analytic
Page: 68
15. In the Baldrige evaluation process, the total possible score of all items is 10,000.
Answer: False
AACSB: Analytic
Page: 68
16. Sustainability refers to an organization's ability to address current business needs and to have the agility and strategic management to prepare successfully for the future.
Answer: True
AACSB: Analytic
Page: 69
17. The 10 major categories of the Deming prize are further divided into "checking points."
Answer: True
AACSB: Analytic
Page: 73
18. For companies that apply for the Deming prize but do not qualify, the examination process is automatically extended up to two times over three years.
Answer: True
AACSB: Analytic
Page: 74

19. In the additional awards given the European Foundation for Quality Management, Recognized for Excellence is given for organizations that are at the beginning of the journey to excellence.
Answer: False
AACSB: Analytic
Page: 75
20. Enablers are the means by which an organization approaches its business responsibilities.
Answer: True
AACSB: Analytic
Page: 75
21. According to study cited in the text, Baldrige is a better fit to the national culture of Japan than it is to the U.S.
Answer: True
AACSB: Analytic
Page: 78
22. ISO standards have been adopted in the United States by the American National Standards Institute (ANSI).
Answer: True
AACSB: Analytic
Page: 78
23. The ISO 9004 document includes the fundamentals and vocabulary of the ISO standards.
Answer: False
AACSB: Analytic
Page: 79
24. The ISO standards of 1994 were controversial as they gave more emphasis to consistency and lesser to quality.
Answer: True
AACSB: Analytic
Page: 79
25. ISO 14001:2004 is the most popular environmental standard.
Answer: True
AACSB: Analytic

26. An ultimate “stretch” goal of all organizations that adopt a Six Sigma philosophy is to have all critical processes, regardless of functional area, at a six sigma level of capability.
Answer: True
AACSB: Reflective Thinking
Page: 84
27. The recognized benchmark for Six Sigma implementation is Western Electric.
Answer: False
AACSB: Analytic
Page: 84
28. Six Sigma is based largely on worker empowerment and teams; TQ is owned by business leader champions.
Answer: False
AACSB: Reflective Thinking
Page: 86
29. Within the service sector, Six Sigma is beginning to be called transformational Six Sigma.
Answer: False
AACSB: Analytic
Page: 87
30. Implementing Six Sigma fulfills in part many of the elements of ISO 9000:2000.
Answer: True
AACSB: Analytic
Page: 89

MULTIPLE CHOICE QUESTIONS

31. Deming’s philosophy called “A System of Profound Knowledge,” consists of four parts. Which of the following is not one of them?
- Appreciation for a system
 - Understanding process variation
 - Theory of knowledge
 - Philanthropy

Answer: D
AACSB: Analytic
Page: 49

32. Deming emphasized that management's job is to:
- optimize the system.
 - maximize employment.
 - achieve suboptimization.
 - control the process indexes.

Answer: A
AACSB: Reflective Thinking
Page: 50

33. Factors that are present as a natural part of a process are called:
- primary variances.
 - environmental causes of variation.
 - common causes of variation.
 - system variances.

Answer: C
AACSB: Analytic
Page: 50

34. Variations that result from special causes are often called:
- special variances.
 - secondary causes of variation.
 - random variances.
 - assignable causes.

Answer: D
AACSB: Analytic
Page: 50

35. _____ arise from external sources that are not inherent in the process.
- Special causes
 - Random variances
 - Common causes
 - Non-system variances

Answer: A
AACSB: Analytic
Page: 50

36. A system governed only by _____ is stable and its performance can be predicted.

- a. special causes
- b. common causes
- c. random variances
- d. assignable causes

Answer: B

AACSB: Reflective Thinking

Page: 51

37. While trying to improve the quality of the system, if managers try to “fix” a _____, they will actually increase the variation in the system.

- a. special cause
- b. secondary variance
- c. common cause
- d. random variance

Answer: C

AACSB: Reflective Thinking

Page: 51

38. In Deming’s view, _____ is/are the chief culprit of poor quality.

- a. common causes
- b. lack of monitoring
- c. assignable causes
- d. variation

Answer: D

AACSB: Analytic

Page: 51

39. SS-Melt Castings is a manufacturing unit supplying parts to engineering companies. Management is thinking about finding a solution for frequent quality issues related to product specifications. Having identified the issue to a common cause, which of the following is the best way to resolve the issue?

- a. Provide quality training to the production employees
- b. Change the technology of the process
- c. Revise product specifications
- d. Outsource specific operations to external vendors

Answer: B

AACSB: Reflective Thinking

Page: 51

40. Deming believed _____ should be the common language across the levels in an organization.

- a. costs
- b. efficiency

- c. management terms
- d. statistics

Answer: D

AACSB: Analytic

Page: 57

41. According to Juran, top management speaks in the language of _____, workers speak in the language of _____.
- a. costs; earnings
 - b. dollars; things
 - c. statistics; workhours
 - d. power; loyalty

Answer: B

AACSB: Reflective Thinking

Page: 57

42. Which of the following are not one of the four categories of Juran's definition of quality?
- a. Quality of design
 - b. Quality of performance
 - c. Availability
 - d. Field service

Answer: B

AACSB: Analytic

Page: 58

43. Quality control involves all of the following except:
- a. identifying internal and external customers.
 - b. establishing units of measurement.
 - c. establishing standards of performance.
 - d. interpreting the difference between actual performance and the standard.

Answer: A

AACSB: Analytic

Page: 58

44. Which of the following is not part of the Quality Trilogy of Juran's philosophy?
- a. Quality planning
 - b. Quality control
 - c. Quality maintenance
 - d. Quality improvement

Answer: C

AACSB: Analytic

45. Juran and Deming would argue that it is pointless to exhort a line worker to produce perfection, because:
- workers are not motivated to improve unless a financial incentive is offered.
 - the overwhelming majority of imperfections are due to poorly designed manufacturing systems.
 - it is the supervisor's responsibility to ensure quality through effective quality control.
 - management systems that are unsupportive of quality initiatives should be reengineered in advance.

Answer: B

AACSB: Reflective Thinking

Page: 59

46. Crosby's Basic Elements of Improvement includes all of the following except:
- determination.
 - education.
 - implementation.
 - inspection.

Answer: D

AACSB: Analytic

Page: 60

47. Which of the following is true of the Baldrige award?
- It purports to establish guidelines and criteria that can be used by business.
 - The award exists simply to recognize product excellence.
 - The award exists for the purpose of "winning."
 - Up to five companies can receive an award in each of the categories.

Answer: D

AACSB: Reflective Thinking

Page: 60

48. The Baldrige award examination is based upon a rigorous set of criteria, called the:
- Seven Points of Superior Quality
 - Criteria for Performance Excellence.
 - Baldrige Points of Excellence.
 - Benchmarks of Quality and Performance.

Answer: B

AACSB: Analytic

Page: 63

49. Which of the following is not part of the “leadership triad?”

- a. Leadership
- b. Strategic focus
- c. Process management
- d. Customer focus

Answer: C

AACSB: Analytic

Page: 65

50. Applicants to the Baldrige Award are required to provide a snapshot of the organization that describes the organizational environment, referred to as the:

- a. Organizational Profile.
- b. Organizational Portfolio.
- c. Organizational Tree.
- d. Organizational Summary.

Answer: A

AACSB: Analytic

Page: 66

51. Each examination item in the Baldrige Criteria is evaluated on the methods the company uses to achieve the requirements addressed in each category. These methods are called:

- a. strategies.
- b. approaches.
- c. operational guidelines.
- d. work plans.

Answer: B

AACSB: Analytic

Page: 67

52. In the Baldrige examination, the factors used to evaluate results include all of the following except:

- a. current performance levels.
- b. rate, breadth, and importance of performance improvements.
- c. performance relative to appropriate comparisons.
- d. evidence of innovation.

Answer: D

AACSB: Analytic

Page: 68

53. After the scores for each examination item are computed, the examiners' comments and scores are discussed among the team of examiners who reviewed the examination to smooth out differences and variations in comments. This is called the _____ stage.
- a. leveling
 - b. arbitration
 - c. consensus
 - d. formalization
- Answer: C
AACSB: Analytic
Page: 68

54. _____ refers to an organization's ability to address current business needs and to have the agility and strategic management to prepare successfully for the future, and to prepare for real-time or short-term emergencies.
- a. Sustainability
 - b. Adaptability
 - c. Proactiveness
 - d. Strategic focus
- Answer: A
AACSB: Analytic
Page: 69

55. As per the Baldrige program, companies with _____ or fewer employees are classified as small businesses.
- a. 200
 - b. 300
 - c. 400
 - d. 500
- Answer: D
AACSB: Analytic
Page: 70

56. As defined by the Union of Japanese Scientists and Engineers, _____ is a system of activities to assure that quality products and services required by customers are economically designed, produced, and supplied while respecting the principle of customer-orientation and the overall public well-being.
- a. Performance Excellence
 - b. Companywide Quality Control
 - c. Deming's 14 Points
 - d. Total Quality
- Answer: B
AACSB: Analytic

57. Which of the following is not one of the recognition levels according to the European Foundation for Quality Management?
- a. EFQM Excellence Award
 - b. Recognized for Excellence
 - c. Committed to Excellence
 - d. Innovated for Excellence

Answer: D

AACSB: Analytic

Page: 75

58. The most recent version of the written quality standards by the International Organization for Standardization is called the _____ family of standards.
- a. ISO 9000:10000
 - b. ISO 10000:2005
 - c. ISO 9000:2000
 - d. ISO 2000:9000

Answer: C

AACSB: Analytic

Page: 78

59. The ISO 9000:2000 standards consist of three documents of which ISO 9001 pertains to:
- a. Fundamentals.
 - b. Requirements.
 - c. Vocabulary.
 - d. Guidance for performance improvement.

Answer: B

AACSB: Analytic

Page: 79

60. Which of the following is true about ISO certification?
- a. The ISO 9000 standards originally were intended to be advisory in nature.
 - b. The entire company and not individual sites must achieve recertification.
 - c. Recertification is required every two years.
 - d. Costs of recertification are borne by the company and the certifying firm.

Answer: A

AACSB: Analytic

Page: 81-82

61. The origin of the term six sigma came from a statistical measure that equates to _____ or fewer errors or defects per million opportunities.

- a. 2.6
- b. 3.4
- c. 4.3
- d. 4.5

Answer: B

AACSB: Analytic

Page: 83

62. In both manufacturing and nonmanufacturing processes, places where the defective “product” is sent to be reworked or scrapped are referred to as:

- a. recycling units.
- b. outlier facilities.
- c. hidden factories.
- d. reengineering units.

Answer: C

AACSB: Analytic

Page: 88

63. In the DMAIC process, a source of customer dissatisfaction is referred to as a(n):

- a. critical to quality.
- b. outlier feature.
- c. dissatisfier.
- d. variance factor.

Answer: A

AACSB: Analytic

Page: 88

64. Which of the following is not true of the three main quality systems?

- a. Baldrige concentrates on fixing quality system problems and product and service nonconformities.
- b. ISO focuses on product and service conformity for guaranteeing equity in the marketplace.
- c. Six Sigma concentrates on measuring product quality and driving process improvement.
- d. ISO 9000 is an excellent starting point for companies with no formal quality assurance program.

Answer: A

AACSB: Reflective Thinking

Page: 89

65. Six Sigma methodology is driven by a _____ methodology.
- fit-for-use
 - conformance-to-specifications
 - management-by-fact
 - cost-driven

Answer: C

AACSB: Reflective Thinking

Page: 90

ESSAY QUESTIONS

66. Define a system and describe its relevance according to Deming.

Answer: A system is a set of functions or activities within an organization that work together to achieve organizational goals. Deming believed that the aim of any system is for everybody—stockholders, employees, customers, community, the environment— to gain over the long term.

AACSB: Reflective Thinking

Page: 50

67. Describe the causes of variation.

Answer: A production process contains many sources of variation. Factors that are present as a natural part of a process are called common causes of variation. Common causes generally account for about 80 to 90 percent of the observed variation in a production process. The remaining 10 to 20 percent result from special causes of variation, often called assignable causes. Special causes arise from external sources that are not inherent in the process.

AACSB: Reflective Thinking

Page: 50

68. What are the two premises of Juran's view on quality?

Answer: Juran views the pursuit of quality on two levels: (1) the mission of the firm as a whole is to achieve high product quality; and (2) the mission of each individual department in the firm is to achieve high production quality.

AACSB: Reflective Thinking

Page: 57

69. List Crosby's Absolutes of Management.

Answer: Crosby's Absolutes of Quality Management are as follows:

- Quality means conformance to requirements not elegance.
- There is no such thing as a quality problem.
- There is no such thing as the economics of quality: it is always cheaper to do the job right the first time.

- The only performance measurement is the cost of quality.
- The only performance standard is Zero Defects.

AACSB: Reflective Thinking

Page: 58-59

70. Describe the composition of each category in the Baldrige Criteria.
 Answer: Each category consists of several items (numbered 1.1, 1.2, 2.1, etc.) or major requirements on which businesses should focus. Each item, in turn, consists of a small number of areas to address (e.g., 6.1a, 6.1b) that seek specific information on approaches used to ensure and improve competitive performance, the deployment of these approaches, or results obtained from such deployment.
 AACSB: Reflective Thinking
 Page: 65
71. What is the Organizational Profile?
 Answer: Organizational Profile is basically a snapshot of the organization that describes the organizational environment; key relationships with customers, suppliers, and other partners; types of employees and technologies used; the competitive environment; key strategic challenges it faces; and its system for performance improvement. The Organizational Profile helps the organization focus on key performance requirements and results, and helps examiners to understand the organization and what it considers important.
 AACSB: Reflective Thinking
 Page: 66
72. Describe ISO standards.
 Answer: The International Organization for Standardization was founded in 1946 to standardize quality requirements for European countries within the common market and those wishing to do business with those countries. The ISO adopted a series of written quality standards in 1987, which were revised in 1994, and again in 2000. The most recent version is called the ISO 9000:2000 family of standards. The standards have been adopted in the United States by the American National Standards Institute (ANSI) with the endorsement and cooperation of the American Society for Quality (ASQ).
 AACSB: Reflective Thinking
 Page: 78
73. What is the QS-9000?
 Answer: Deficiencies in the old ISO 9000 standards led to a joint effort 1994 by the big three automobile manufacturers—Ford, Chrysler, and General Motors—as well as several truck manufacturers, to develop QS-9000, an interpretation and extension of ISO 9000 for automotive suppliers. QS-9000 is based on ISO 9000 and includes all ISO requirements. However, QS-9000 went well beyond ISO

9000 standards by including additional requirements such as continuous improvement, manufacturing capability, and production part approval processes.

AACSB: Reflective Thinking

Page: 80

74. Contrast total quality (TQ) and Six Sigma.

Answer: The following are the major differences between TQ and Six Sigma:

- TQ is based largely on worker empowerment and teams; Six Sigma is owned by business leader champions.
- TQ activities generally occur within a function, process, or individual workplace; Six Sigma projects are truly cross-functional.
- TQ training is generally limited to simple improvement tools and concepts; Six Sigma focuses on a more rigorous and advanced set of statistical methods and a structured problem-solving methodology, DMAIC.
- TQ is focused on improvement with little financial accountability; Six Sigma requires a verifiable return on investment and focus on the bottom line.

AACSB: Reflective Thinking

Page: 86

75. Compare the three major frameworks for quality systems.

Answer: Baldrige focuses on performance excellence for the entire organization in an overall management framework, identifying and tracking important organizational results; ISO focuses on product and service conformity for guaranteeing equity in the marketplace and concentrates on fixing quality system problems and product and service nonconformities; and Six Sigma concentrates on measuring product quality and driving process improvement and cost savings throughout the organization.

AACSB: Reflective Thinking

Page: 89