**Chapter 5: Managing for Quality**

**Practice Problems**

**MULTIPLE CHOICE**

1. Which statement is true about different definitions of quality?

|  |  |
| --- | --- |
| a. | fitness for use |
| b. | design to specifications |
| c. | the process of building and improving relationships with customers |
| d. | all of these |

ANS: D PTS: 1 DIF: Medium

2. The concept of value that is achieved by producing and selling a quality product or service and making the highest possible profit would correspond with what type of value?

|  |  |
| --- | --- |
| a. | customer |
| b. | producer |
| c. | government agency |
| d. | quality assurance agency |

ANS: B PTS: 1 DIF: Easy

3. Harry likes to go to the local drag strip and race car place. His view of the quality of a particular car in this situation would rely upon what dimension of quality?

|  |  |
| --- | --- |
| a. | aesthetics |
| b. | conformance |
| c. | durability |
| d. | performance |

ANS: D PTS: 1 DIF: Easy

4. Sue Miller is an audiophile. She is very knowledgeable about the electronics of sophisticated audio systems. Noise, for example, that large speakers should be able to produce coherent sound is 105 ± 2 dB. This would be an example of what dimension of quality?

|  |  |
| --- | --- |
| a. | aesthetics |
| b. | conformance |
| c. | durability |
| d. | performance |

ANS: B PTS: 1 DIF: Medium

5. An individual examines two cars. He selects one model because it has more stereo speakers, a built-in GPS, and a coin tray. This would be an example of what type of quality?

|  |  |
| --- | --- |
| a. | aesthetics |
| b. | conformance |
| c. | features |
| d. | perceived quality |

ANS: C PTS: 1 DIF: Medium

6. The military is looking to purchase laptop computers for soldiers in the battlefield. The laptop should function in extremes of heat, after being dropped and being exposed to both sand and water. This would be an example of what dimension of quality?

|  |  |
| --- | --- |
| a. | aesthetics |
| b. | conformance |
| c. | durability |
| d. | reliability |

ANS: C PTS: 1 DIF: Hard

7. When a heart surgeon is examining different types of pacemakers for elderly patients, what might be one of the most important dimensions of quality?

|  |  |
| --- | --- |
| a. | aesthetics |
| b. | conformance |
| c. | durability |
| d. | reliability |

ANS: D PTS: 1 DIF: Medium

8. The U.S. Marine Corps is looking at acquiring a propeller-driven aircraft that would be used for spotting enemy movements. This aircraft would serve at the frontlines. High on the list of the Marine Corps requirements is that all repairs could be done in the field. This would be an example of what important dimension of quality?

|  |  |
| --- | --- |
| a. | aesthetics |
| b. | conformance |
| c. | reliability |
| d. | serviceability |

ANS: D PTS: 1 DIF: Medium

9. Apple products have a certain cachet. What dimension of quality is often associated with Apple products?

|  |  |
| --- | --- |
| a. | aesthetics |
| b. | conformance |
| c. | durability |
| d. | reliability |

ANS: A PTS: 1 DIF: Medium

10. When you walk into a drugstore you can buy brand-name aspirin or generic-brand aspirin. Essentially the composition of both aspirins is identical. However, the name brand aspirins might be priced at 2 or 3 times that of generics. This is an example of what dimension of quality?

|  |  |
| --- | --- |
| a. | aesthetics |
| b. | conformance |
| c. | features |
| d. | perceived quality |

ANS: D PTS: 1 DIF: Medium

11. How many dimensions are associated with service quality?

|  |  |
| --- | --- |
| a. | three |
| b. | five |
| c. | six |
| d. | seven |

ANS: B PTS: 1 DIF: Easy

12. What are the dimensions of service quality?

|  |  |
| --- | --- |
| a. | assurance, empathy, and reliability |
| b. | assurance, empathy, reliability, responsiveness, and tangibles |
| c. | assurance, empathy, perception, reliability, responsiveness, and tangibles |
| d. | aesthetics, assurance, empathy, reliability, perception, reliability, responsiveness, and tangibles |

ANS: C PTS: 1 DIF: Medium

13. What company is a two-time winner of the Baldrige Award?

|  |  |
| --- | --- |
| a. | Apple |
| b. | McDonalds |
| c. | Ritz-Carlton |
| d. | Target |

ANS: C PTS: 1 DIF: Easy

14. Which of the following would NOT be a clear benefit of improving quality?

|  |  |
| --- | --- |
| a. | increased satisfaction |
| b. | decreased revenue |
| c. | increased productivity |
| d. | lower costs |

ANS: B PTS: 1 DIF: Easy

15. Which of the following would not be a component cost of quality?

|  |  |
| --- | --- |
| a. | prevention |
| b. | appraisal |
| c. | reaction |
| d. | internal |

ANS: C PTS: 1 DIF: Medium

16. The cost from defects before a product is delivered to the customer would be what type of quality cost?

|  |  |
| --- | --- |
| a. | prevention |
| b. | appraisal |
| c. | external |
| d. | internal |

ANS: D PTS: 1 DIF: Hard

17. The use of statistical process control, quality training, and quality circles would be what type of quality cost?

|  |  |
| --- | --- |
| a. | prevention |
| b. | appraisal |
| c. | external |
| d. | internal |

ANS: A PTS: 1 DIF: Medium

18. The testing and inspection of raw materials, work in process, and finished goods would be an example of what type of quality cost?

|  |  |
| --- | --- |
| a. | prevention |
| b. | appraisal |
| c. | external |
| d. | internal |

ANS: B PTS: 1 DIF: Medium

19. Who is most closely associated with the quality notion of standardization parts?

|  |  |
| --- | --- |
| a. | Crosby |
| b. | Deming |
| c. | Juran |
| d. | Whitney |

ANS: D PTS: 1 DIF: Medium

20. What individual would be most closely associated with the concept of standardized management practices and the value of teamwork?

|  |  |
| --- | --- |
| a. | Crosby |
| b. | Deming |
| c. | Taylor |
| d. | Whitney |

ANS: C PTS: 1 DIF: Medium

21. Who is generally considered the father of statistical process control theory?

|  |  |
| --- | --- |
| a. | Deming |
| b. | Ishikawa |
| c. | Shewart |
| d. | Shingo |

ANS: C PTS: 1 DIF: Hard

22. Who is considered a philosopher of quality management and has a prize named for him in Japan?

|  |  |
| --- | --- |
| a. | Deming |
| b. | Ishikawa |
| c. | Taguchi |
| d. | Shingo |

ANS: A PTS: 1 DIF: Medium

23. Which one of the quality gurus identified the four costs associated with quality?

|  |  |
| --- | --- |
| a. | Crosby |
| b. | Deming |
| c. | Juran |
| d. | Shingo |

ANS: C PTS: 1 DIF: Medium

24. Which quality guru is most closely associated with the program known as total quality management?

|  |  |
| --- | --- |
| a. | Crosby |
| b. | Deming |
| c. | Feigenbaum |
| d. | Shewart |

ANS: C PTS: 1 DIF: Hard

25. Which quality guru is associated with Fishbone charts and identification of causes?

|  |  |
| --- | --- |
| a. | Deming |
| b. | Ishikawa |
| c. | Shewart |
| d. | Shingo |

ANS: B PTS: 1 DIF: Medium

26. Which quality guru is the author of the book *Quality Is Free*?

|  |  |
| --- | --- |
| a. | Crosby |
| b. | Deming |
| c. | Feigenbaum |
| d. | Shewart |

ANS: A PTS: 1 DIF: Easy

27. Which quality guru is associated with poka yoke and fail-safing?

|  |  |
| --- | --- |
| a. | Deming |
| b. | Ishikawa |
| c. | Taguchi |
| d. | Shingo |

ANS: D PTS: 1 DIF: Medium

28. Which quality guru is most associated with the concepts of loss function and the design of experiments?

|  |  |
| --- | --- |
| a. | Deming |
| b. | Ishikawa |
| c. | Taguchi |
| d. | Shingo |

ANS: C PTS: 1 DIF: Medium

29. Which quality system is most closely associated with the notion of continuous improvement?

|  |  |
| --- | --- |
| a. | PDSA |
| b. | Kaizen |
| c. | ISO |
| d. | ASQ |

ANS: B PTS: 1 DIF: Medium

30. Which quality guru is most closely associated with the PDSA cycle?

|  |  |
| --- | --- |
| a. | Deming |
| b. | Ishikawa |
| c. | Shewart |
| d. | Shingo |

ANS: C PTS: 1 DIF: Hard

31. The elements of TQM do not contain which of the following?

|  |  |
| --- | --- |
| a. | data driven |
| b. | leadership |
| c. | legal requirements |
| d. | supplier involvement |

ANS: C PTS: 1 DIF: Easy

32. The process of comparing the quality of your company’s products or services and its processes with those companies considered to be world leaders in quality is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | re-engineering |
| b. | benchmarking |
| c. | mistake proofing |
| d. | Kaizen |

ANS: B PTS: 1 DIF: Medium

33. What organization was formed in 1947 in Geneva to assure quality across nations?

|  |  |
| --- | --- |
| a. | ASQ |
| b. | ISO |
| c. | GATT |
| d. | WTO |

ANS: B PTS: 1 DIF: Medium

34. ISO 14000 is most closely associated with what area?

|  |  |
| --- | --- |
| a. | environment |
| b. | health |
| c. | manufacturing |
| d. | service |

ANS: A PTS: 1 DIF: Medium

35. ISO 9000 is most closely associated with what area?

|  |  |
| --- | --- |
| a. | environment |
| b. | health |
| c. | manufacturing |
| d. | service |

ANS: C PTS: 1 DIF: Easy

36. Which is NOT a component of the scoring system for the Baldrige Award?

|  |  |
| --- | --- |
| a. | customer focus |
| b. | strategic planning |
| c. | sales management |
| d. | measurement analysis |

ANS: C PTS: 1 DIF: Medium

37. The concept of Six Sigma refers to what number of defects?

|  |  |
| --- | --- |
| a. | 6.2/hundred thousand |
| b. | 1.0/million |
| c. | 3.4/million |
| d. | 3.4/billion |

ANS: C PTS: 1 DIF: Medium

38. At Six Sigma, the percentage of accuracy is \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | 93.3% |
| b. | 99.4% |
| c. | 99.97% |
| d. | 99.9997% |

ANS: D PTS: 1 DIF: Medium

39. The designation DMAIC refers to what five elements?

|  |  |
| --- | --- |
| a. | design, manage, analyze, improve, and control |
| b. | designate, manipulate, authorize, involvement, and counter |
| c. | define, measure, analyze, improve, and control |
| d. | define, manage, authorize, improve, and control |

ANS: C PTS: 1 DIF: Medium

40. When a company wishes to apply a Six Sigma approach to a new product or process, it should use \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | DMAIC |
| b. | DMIAD |
| c. | DMADV |
| d. | DIGAS |

ANS: C PTS: 1 DIF: Medium

41. When one identifies the few but most critical causes of a problem, he or she is conducting what type of analysis?

|  |  |
| --- | --- |
| a. | Six Sigma |
| b. | Kaizen |
| c. | Pareto |
| d. | statistical |

ANS: C PTS: 1 DIF: Medium

42. Monitoring outputs from a process to determine if that process is operating within established control limits is what type of analysis?

|  |  |
| --- | --- |
| a. | checklist |
| b. | Pareto |
| c. | process control charts |
| d. | Six Sigma |

ANS: C PTS: 1 DIF: Easy

43. A quality model that consists of the following dimension—reliability, responsiveness, assurance, empathy, and tangibles—is \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | Six Sigma |
| b. | SERVQUAL |
| c. | RATER |
| d. | ISO |

ANS: C PTS: 1 DIF: Medium

44. What quality model is an example of a gap model approach to measuring quality?

|  |  |
| --- | --- |
| a. | Six Sigma |
| b. | SERVQUAL |
| c. | RATER |
| d. | ISO |

ANS: B PTS: 1 DIF: Medium

45. The process of designing a product so that it can be transported easily through the supply chain is known as \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | design for supply chain |
| b. | design for logistics |
| c. | design for living |
| d. | delivery design |

ANS: B PTS: 1 DIF: Easy

46. Which of the following is NOT a benefit of third-party quality assurance for a global supply chain?

|  |  |
| --- | --- |
| a. | aids in learning foreign languages |
| b. | cutting down on travel |
| c. | reduced paperwork |
| d. | more effective communication with suppliers |

ANS: A PTS: 1 DIF: Medium

47. What organization would be of greatest assistance in assuring quality throughout a global supply chain?

|  |  |
| --- | --- |
| a. | ASQ |
| b. | ANSI |
| c. | ISO |
| d. | Baldrige |

ANS: C PTS: 1 DIF: Medium

48. A commitment to sustainability would NOT produce which of the following benefits?

|  |  |
| --- | --- |
| a. | increased quality |
| b. | decreased scrap |
| c. | decreased energy usage |
| d. | decreased lawsuits |

ANS: D PTS: 1 DIF: Easy

49. Which firm is named in the text as one of the top-ten worldwide organizations for social responsibility?

|  |  |
| --- | --- |
| a. | Nestle |
| b. | Apple |
| c. | Airbus |
| d. | Target |

ANS: A PTS: 1 DIF: Medium

50. What standards could be used to improve a firm’s commitment to sustainability?

|  |  |
| --- | --- |
| a. | ISO 9000 |
| b. | ISO 14000 |
| c. | ISO 5001 |
| d. | ISO 31000 |

ANS: B PTS: 1 DIF: Medium