## Managing Quality: Integrating the Supply Chain, 6e (Foster) Chapter 2 Quality Theory

1) A conerent group of general propositions used as principles of explanation for a class of
phenomena is referred to as a(n)
A) postulate
B) axiom
C) theory
D) corollary
E) hypothesis
Answer: C
Diff: 1
Learning Outcome: Discuss the total cost of quality and compare the common methods of
managing quality
LO: 2.1: Integrate theories and concepts form key thought leaders.
AACSB: Application of Knowledge
Type: Concept
2) An arrow pointing from an independent variable to a dependent variable in a theoretical model
typically implies
A) causality
B) normality
C) randomness
D) proactivity
E) synergy
Answer: A
Diff: 1
Learning Outcome: Discuss the total cost of quality and compare the common methods of
managing quality
LO: 2.1: Integrate theories and concepts form key thought leaders.
AACSB: Application of Knowledge
Type: Concept
Type. Concept
3) The of a theoretical model involves which variables or factors are included in the
model.
A) why
B) what
C) how
D) who-where-when
E) which
Answer: B
Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of
managing quality
LO: 2.1: Integrate theories and concepts form key thought leaders.
AACSB: Application of Knowledge
Type: Concept
4) The of a theoretical model involves the nature, direction, and extent of the

relationship among the variables.  A) why B) what C) how D) who-where-when E) which Answer: C Diff: 2 Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality LO: 2.1: Integrate theories and concepts form key thought leaders.  AACSB: Application of Knowledge Type: Concept
5) The of a theoretical model is the theoretical glue that holds the model together. A) why B) what C) how D) who-where-when E) which Answer: A Diff: 2 Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality LO: 2.1: Integrate theories and concepts form key thought leaders. AACSB: Application of Knowledge Type: Concept
6) The of a theoretical model is responsible for placing contextual bounds on the theory.  A) why B) what C) how D) who-where-when E) which Answer: D Diff: 2 Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality LO: 2.1: Integrate theories and concepts form key thought leaders.  AACSB: Application of Knowledge Type: Concept

7) A theory that is generated by observation and description is said to have been developed by
the process of
A) deduction
B) abstraction
C) simulation
D) induction
E) supposition
Answer: D
Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality
LO: 2.1: Integrate theories and concepts form key thought leaders.
AACSB: Application of Knowledge
Type: Concept
Type. Concept
8) Researchers use to propose a model based on prior research, and design an experiment to test the theoretical model.
<u>.</u>
A) supposition B) deduction
C) induction
D) simulation
E) abstraction
Answer: B
Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of
managing quality
LO: 2.1: Integrate theories and concepts form key thought leaders.
AACSB: Application of Knowledge Type: Concept
Type. Concept
9) An arrow pointing from an independent variable to a dependent variable in a theoretical model typically implies causality.  Answer: TRUE  Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality
LO: 2.1: Integrate theories and concepts form key thought leaders.
AACSB: Application of Knowledge
Type: Concept
×1 1

10) The four elements of a theory are what, how, why, and who-where-when.

Answer: TRUE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.1: Integrate theories and concepts form key thought leaders.

AACSB: Application of Knowledge

Type: Concept

11) The "what" of a theoretical model involves the nature, direction, and extent of the relationship among variables.

Answer: FALSE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.1: Integrate theories and concepts form key thought leaders.

AACSB: Application of Knowledge

Type: Concept

12) The "why" of a theory is the theoretical model that holds the model together.

Answer: TRUE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.1: Integrate theories and concepts form key thought leaders.

AACSB: Application of Knowledge

Type: Concept

13) A theory that is generated by observation and description is said to have been developed by the process of deduction.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.1: Integrate theories and concepts form key thought leaders.

AACSB: Application of Knowledge

Type: Concept

14) Using deduction, researchers propose a model based on prior research, and design an experiment to test the theoretical model.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.1: Integrate theories and concepts form key thought leaders.

AACSB: Application of Knowledge

Type: Concept

15) Define theory. Provide an example of the use of theory in a business organization.

Answer: Generally, theory is a "coherent group of general propositions used as principles of explanation for a class of phenomena." For example, it might have been observed that many companies that have implemented quality improvement have experienced improved worker morale. Therefore, a theoretical model of quality and worker morale might be developed.

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.1: Integrate theories and concepts form key thought leaders.

AACSB: Application of Knowledge

Type: Application

- 16) The "14 points for management" were articulated by \_\_\_\_\_.
- A) Philip Crosby
- B) Joseph M. Juran
- C) Genichi Taguchi
- D) W. Edwards Deming
- E) Armand Feigenbaum

Answer: D Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

- 17) Deming believed that poor quality resulted from \_\_\_\_\_\_
- A) poor management of the system for continual improvement
- B) poor human resource management
- C) consumer complacency
- D) a lack of commitment on the part of management
- E) poor engineering and design

Answer: A

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

- 18) Which of the following points for management devised by Deming involves the management committing resources to ensure that the quality job is completed?
- A) constantly improve the system
- B) eliminate work standards
- C) improve leadership
- D) adopt a new philosophy
- E) create constancy of purpose

Answer: E

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

- 19) \_\_\_\_\_ means that all workers are responsible for their own work and perform necessary inspections at each stage of the process to maintain process control.
- A) Quality at the source
- B) In-process management
- C) Constancy of purpose
- D) Parallel processing
- E) Just-in-time approach

Answer: A

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

- 20) \_\_\_\_\_ minimizes the number of suppliers used, resulting in decreased variability.
- A) Parallel processing
- B) Single source purchasing
- C) Management by objective
- D) In-process management
- E) Constancy of purpose

Answer: B

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

21) Which of the following points for management devised by Deming encourages parallel processing in focused teams?

- A) constantly improve the system B) create constancy of purpose C) institute education and self-improvement D) adopt a new philosophy E) break down barriers between departments Answer: E Diff: 3 Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality. AACSB: Application of Knowledge Type: Concept refers to a process of setting annual goals, typically during a performance appraisal, that are binding to the employee. A) Just-in-time approach B) Management by objective C) In-process management D) Parallel processing E) Constancy of purpose Answer: B Diff: 2 Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality. AACSB: Application of Knowledge Type: Concept 23) What are the three aspects of Juran's trilogy? A) planning, control, and improvement B) cost, quality, and customer satisfaction C) labor, management, and system D) organizing, management, and control E) leadership, cost, and quality Answer: A Diff: 2 Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality. AACSB: Application of Knowledge Type: Concept
- 24) According to Juran, \_\_\_\_\_ is a process-related activity that ensures processes are stable and provides a relatively consistent outcome.

  A) control
- B) organizing

C) planning D) improvement E) scheduling Answer: A Diff: 2 Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality. AACSB: Application of Knowledge Type: Concept
improvement implies that the process has been studied and that some major improvement has resulted in large, nonrandom improvement to the process.  A) Ongoing B) Progressive C) Successive D) Continuous E) Breakthrough Answer: E Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality  LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.  AACSB: Application of Knowledge  Type: Concept
26) Juran teaches that improvement in organizations is accomplished on a basis.  A) project-by-project B) trial-by-trial C) process-by-process D) production-by-production E) case-by-case Answer: A Diff: 2 Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.  AACSB: Application of Knowledge Type: Concept
27) According to Juran, the language of management is A) labor B) quality C) money D) performance E) improvement

Answer: C Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

- 28) According to Juran, the language of things pertains to \_\_\_\_\_.
- A) quality inspectors
- B) managers
- C) workers
- D) quality managers
- E) engineers

Answer: C

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

- 29) The driving force of the Century of Productivity was the movement known as \_\_\_\_\_.
- A) total quality management
- B) statistical process control
- C) human resource management
- D) scientific management
- E) behavioral modification

Answer: D Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

30) The theory of scientific management was proposed by  A) Frederick W. Taylor  B) Joseph M. Juran  C) Philip Crosby  D) W. Edwards Deming  E) Kaoru Ishikawa  Answer: A  Diff: 2  Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality  LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.  AACSB: Application of Knowledge  Type: Concept
31) is also called the 80/20 rule. A) Ishikawa's quality philosophy B) Pareto's law C) Juran trilogy D) Taguchi method E) Deming's points for management Answer: B
Diff: 1 Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality. AACSB: Application of Knowledge Type: Concept
32) was responsible for the development and dissemination of the basic seven tools of quality.  A) Kaoru Ishikawa B) Philip Crosby C) Genichi Taguchi D) Armand Feigenbaum E) Joseph M. Juran Answer: A Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality  LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.  AACSB: Application of Knowledge  Type: Concept

33) \_\_\_\_\_\_ is credited with democratizing statistics.

- A) Armand Feigenbaum
- B) Joseph M. Juran
- C) Genichi Taguchi
- D) Philip Crosby
- E) Kaoru Ishikawa

Answer: E Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

- 34) What is the major theoretical contribution of Kaoru Ishikawa?
- A) the concept of benchmarking
- B) his assertion that the entire organization should be involved in improving quality
- C) the zero-defects approach to quality improvement
- D) his emphasis on total involvement of the operating employees in improving quality
- E) the quality loss function and the concept of robust design

Answer: D Diff: 3

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

- 35) What is the primary contribution of Armand Feigenbaum?
- A) the concept of benchmarking
- B) his assertion that the entire organization should be involved in improving quality
- C) the zero-defects approach to quality improvement
- D) his emphasis on total involvement of the operating employees in improving quality
- E) the quality loss function and the concept of robust design

Answer: B Diff: 3

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

- 36) What are the three steps proposed by Feigenbaum to improve quality?
- A) quality inspection, quality accountability, and quality control
- B) quality leadership, quality technology, and organizational commitment
- C) employee empowerment, total quality management, and statistical process control
- D) self-directed work teams, employee empowerment, and total quality management
- E) quality leadership, quality management, and total quality control

Answer: B Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

37) \_\_\_\_\_ proposed "The 19 steps of Total Quality Control."

A) Philip Crosby

- B) W. Edwards Deming
- C) Joseph M. Juran
- D) Genichi Taguchi
- E) Armand Feigenbaum

Answer: E Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

- 38) What is the primary contribution of Philip Crosby?
- A) the concept of benchmarking
- B) his assertion that the entire organization should be involved in improving quality
- C) the zero-defects approach to quality improvement
- D) his emphasis on total involvement of the operating employees in improving quality
- E) the quality loss function and the concept of robust design

Answer: C Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

- 39) What is the primary contribution of Genichi Taguchi?
- A) the concept of benchmarking
- B) his assertion that the entire organization should be involved in improving quality
- C) the zero-defects approach to quality improvement
- D) his emphasis on total involvement of the operating employees in improving quality
- E) the quality loss function and the concept of robust design

Answer: E Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

- 40) Quality loss function and robust design are concepts included in \_\_\_\_\_.
- A) Ishikawa's quality philosophy
- B) the Taguchi method
- C) Deming's 14 points for management
- D) the Juran trilogy
- E) Pareto's law

Answer: B Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

- 41) \_\_\_\_\_\_ refers to a reference point for determining the quality level of a product or service.
- A) Quality of conformance
- B) Hothouse quality
- C) Quality loss function
- D) Specific quality
- E) Ideal quality

Answer: E

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

42) The Taguchi concept of states that products and services should be designed so
that they are inherently defect-free and of high quality.
A) homoscedasticity
B) robust design
C) quality loss function
D) ideal quality
E) design conformance
Answer: B
Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of
managing quality
LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the
best methods for managing quality.
AACSB: Application of Knowledge
Type: Concept
43) is the principle pioneer of benchmarking.
A) Robert C. Camp
B) Tom Peters
C) Michael Hammer
D) James Champy
E) Stephen R. Covey
Answer: A
Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of
managing quality
LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the
best methods for managing quality.
AACSB: Application of Knowledge
Type: Concept
44) M' 1 1 II
44) Michael Hammer and James Champy are most closely identified with
A) statistical process control
B) reengineering
C) total quality management
D) benchmarking  E) Six Sigma avality
E) Six Sigma quality
Answer: B Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of
managing quality  LO: 23: Discuss the differing ideas from quality management thought leaders to determine the
LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the
best methods for managing quality.
AACSB: Application of Knowledge
Type: Concept

- 45) \_\_\_\_\_ is best known for his book, *The 7 Highly Effective People*.
- A) Robert C. Camp
- B) Tom Peters
- C) Michael Hammer
- D) James Champy
- E) Stephen R. Covey

Answer: E Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

46) W. Edwards Deming enumerated the 14 points for management.

Answer: TRUE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

47) According to Deming, poor quality was the fault of labor.

Answer: FALSE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

48) Constancy of purpose means that management commits resources in order to achieve quick returns and bottom-line results.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

49) Deming proposes the need for mass inspection to improve quality.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

50) Quality at the source means that all workers are responsible for their own work and perform needed inspections at each stage of the process to maintain process control.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Application

51) Just-in-time purchasing increases the number of suppliers used, resulting in increased variability.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Application

52) Just-in-time purchasing involves the usage of long-term contracts that result in the ability to develop and certify suppliers.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

53) Fast design cycles are a result of the departmental approach to design.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

54) Deming stressed the need for work standards on the factory floor.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

55) Management by objective refers to a process of setting annual goals that are binding on the employee.

Answer: TRUE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

56) The three aspects of the Juran trilogy are planning, control, and improvement.

Answer: TRUE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

57) Control involves gathering data about a process to ensure the process is consistent.

Answer: TRUE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

58) Breakthrough improvement implies the process has been studied and that some major improvement has resulted in large nonrandom improvement to the process.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

59) The theory of scientific management was proposed by Joseph Juran.

Answer: FALSE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

60) According to the theory of scientific management, the managers and engineers should be responsible for planning and executing the plans.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

61) Kaoru Ishikawa is credited with democratizing statistics.

Answer: TRUE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

62) The major theoretical contribution of Ishikawa is his emphasis on total involvement of the operating employees in improving quality.

Answer: TRUE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

63) According to Kaoru Ishikawa, the ideal state of quality control is when inspection is no longer necessary.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

64) Feigenbaum's three-step process to improve quality include quality leadership, quality technology, and organizational commitment.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

65) Hothouse quality refers to quality programs that receive a lot of hoopla and no follow-through.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

66) The zero-defects approach to quality improvement was proposed by Armand Feigenbaum.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

67) The Taguchi method provides a method for adjusting the mean of a process by optimizing controllable variables.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

68) Quality loss function and robust design are concepts included in Ishikawa's quality philosophy.

Answer: FALSE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

69) Ideal quality refers to a reference point for determining the quality level of a product or service.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

70) The Taguchi concept of robust design states that products and services should be designed so that they are inherently defect-free and of high quality.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

71) Tom Peters is the principle pioneer of benchmarking.

Answer: FALSE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

72) Robert C. Camp's approach to management is value-based in that he proposes that people in management live a life that balances professional with personal and spiritual growth.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Application

73) Michael Hammer and James Champy are most closely identified with reengineering.

Answer: TRUE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

74) Discuss the contributions of W. Edwards Deming to quality thinking.

Answer: W. Edwards Deming has made a profound impact on quality thinking worldwide. Throughout his career, Deming gave seminars, wrote books, taught classes, and published articles to explain his approach to quality management. Deming's mantra was "continual, neverending improvement." The essence of his thinking was that quality is a function of the management within a firm, and is not the sole responsibility of workers. Deming used statistics to support his arguments. He argued that the goals of higher levels of quality would perhaps never be completely met, but firms that continually worked toward higher levels of quality would get better. He articulated his thinking in his "14 Points for Management."

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

75) State Deming's 14 points for management.

Answer: Deming's 14 points for management represent many of the key principles that provide the basis for quality management in many organizations.

Create constancy of purpose.

Adopt a new philosophy.

Cease mass inspection.

End awarding business on the basis of price tag.

Constantly improve the system.

Institute training on the job.

Improve leadership.

Drive out fear.

Break down barriers between departments.

Eliminate slogans.

Eliminate work standards.

Remove barriers to pride.

Institute education and self-improvement.

Put everybody to work.

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

76) Differentiate between control and breakthrough with an example.

Answer: According to Juran, control is a process-related activity that ensures processes are stable and provides a relatively consistent outcome. Control involves gathering data about a process to ensure the process is consistent.

Breakthrough improvement implies the process has been studied and that some major improvement has resulted in large nonrandom improvement to the process.

The difference between control and breakthrough can be understood when considering a disease such as polio. Control activities involved improving health by quarantining people who had the disease. Breakthrough improvement occurred with the development of the polio vaccine that eradicated the disease.

It is important to understand that control and breakthrough-related activities should occur simultaneously.

Diff: 3

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Synthesis

## 77) Describe Pareto analysis.

Answer: Joseph Juran identified an economic concept that he applied to quality problems. This economic concept is called Pareto's law or the 80/20 rule, and is named after the Italian economist Vilfredo Pareto. Pareto found that 80 percent of the wealth in Milan was held by 20 percent of the population. Using Pareto's law, we can see that the majority of quality problems are the result of relatively few causes.

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

## 78) Discuss the contributions of Kaoru Ishikawa to quality thinking.

Answer: Kaoru Ishikawa provided tools that worked well within the Deming and Juran frameworks. Perhaps Ishikawa's greatest achievement was the development and dissemination of the basic seven tools of quality (B7). As the developer of these tools, Ishikawa is credited with democratizing statistics. The major theoretical contribution of Ishikawa is his emphasis on total involvement of the operating employees in improving quality. Ishikawa is credited for coining the term "company-wide quality control" in Japan. His ideas were synthesized into 11 points that made up his quality philosophy.

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

79) Discuss the contributions of Armand Feigenbaum to quality thinking.

Answer: Armand Feigenbaum proposed 19 steps for improving quality. Feigenbaum's primary contribution to quality thinking in America was his assertion that the entire organization should be involved in improving quality. He was the first in the United States to move quality from the offices of the specialist back to the operating workers.

Feigenbaum proposes a three-step process to improving quality. These steps involve quality leadership, quality technology, and organizational commitment.

Leadership is the motivating force for quality improvement. Quality technology includes statistics and machinery that can be used to improve technology. Organizational commitment includes everyone in the quality struggle.

Major impediments to improving quality included the four deadly sins of hothouse quality, wishful thinking, producing overseas, and confining quality to the factory.

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

80) Discuss the contributions of Philip Crosby to quality theory.

Answer: Crosby specified a quality improvement program consisting of 14 steps. These steps underlie the Crosby zero-defects approach to quality improvement. His approach also emphasized the behavioral and motivational aspects of quality improvement rather than statistical approaches. In his 14 steps, Crosby prescribed actions for management and workers within the context of his program.

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

## 81) Explain the Taguchi concept of robust design.

Answer: The Taguchi concept of robust design states that products and services should be designed so that they are inherently defect-free and of high quality. Taguchi devised a three-stage process that achieves robust design through what he terms concept design, parameter design, and tolerance design.

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

82) Discuss the contributions of Stephen R. Covey to quality thinking.

Answer: Stephen R. Covey's approach to management is value-based in that he proposes that

people in management live a life that balances professional with personal and spiritual growth.

He coined seven habits based on his value-based approach to life.

Be proactive

Begin with the end in mind

Put first things first

Think win-win

Seek first to understand and then to be understood

Synergize

Sharpen the saw

Covey also published a book with an eighth habit:

Find your voice, and inspire others to find theirs.

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

Type: Concept

83) Explain the concept of reengineering proposed by Michael Hammer and James Champy. Answer: Michael Hammer and James Champy urged a form of deductive reasoning combined with entertainment that has resulted in unfortunate consequences for many people and companies. The product of this collaboration is termed reengineering. The underlying precept of reengineering is sound: Firms can become inflexible and resistant to change and must be able to change in order to become competitive.

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.2: Discuss the differing ideas from quality management thought leaders to determine the best methods for managing quality.

AACSB: Application of Knowledge

- 84) Which of the following variables is at the core of quality management?
- A) quality breakthrough
- B) quality assurance
- C) strategic planning
- D) information analysis
- E) team approach

Answer: B Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality management system.

AACSB: Application of Knowledge

Type: Concept

- 85) Which of the following variables is <u>not</u> at the core of quality management?
- A) leadership
- B) employee improvement
- C) customer role
- D) philosophy
- E) environmental characteristics

Answer: E Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality management system.

AACSB: Application of Knowledge

Type: Concept

- 86) Which of the following variables would <u>not</u> be considered core, but is important in a supporting role in quality management?
- A) quality assurance
- B) information analysis
- C) customer role
- D) philosophy
- E) leadership

Answer: B

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality management system.

AACSB: Application of Knowledge

87) Quality experts agree that quality can be assured only during the phase. A) production
B) marketing
C) analysis D) testing
E) design Answer: E
Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality
LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality
management system.  AACSB: Application of Knowledge
Type: Concept
88) Which of the following factors is <u>not</u> addressed by the reengineering approach to quality improvement?
A) team approach B) information analysis
C) strategic planning
D) customer focus E) quality assurance
Answer: B Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of
managing quality LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality
management system.
AACSB: Application of Knowledge Type: Concept
89) The idea that successful firms adopt aspects of each of the various approaches to quality is
referred to as a(n) perspective.
A) engineering B) operations
C) contingency D) customer focus
E) quality assurance
Answer: C Diff: 2
Learning Outcome: Discuss the total cost of quality and compare the common methods of
managing quality LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality
management system.
AACSB: Application of Knowledge Type: Concept

90) The underlying precept of reengineering is that firms can become inflexible and resistant to change.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality management system.

AACSB: Application of Knowledge

Type: Concept

91) Firms that are successful in improving quality take a contingency approach.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality management system.

AACSB: Application of Knowledge

Type: Concept

92) Strategic planning is at the core of quality management.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality management system.

AACSB: Application of Knowledge

Type: Concept

93) Fact-based improvement refers to an approach that favors information gathering and analysis.

Answer: TRUE

Diff: 1

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality management system.

AACSB: Application of Knowledge

94) The reengineering approach focuses on the need for in-depth information gathering and analysis.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality management system.

AACSB: Application of Knowledge

Type: Concept

95) Identify and briefly discuss the core quality management content variables.

Answer: The core variables are leadership, employee improvement, quality assurance, customer role, and philosophy. The role of the leader in being the champion and major force behind quality improvement is critical. Leaders must be conversant with quality management approaches, and then lead by example. Employees must be trained and developed, and this must be viewed as a long-term undertaking that requires firms to invest in their employees. Quality can be assured only during the design phase. Therefore, efforts must be invested in designing products, services, and processes so that they are consistently of high quality. An understanding of the customer is key to quality management efforts.

Adoption of a philosophy toward quality improvement is important because it provides the company with a map to follow during their quest for improvement.

Diff: 2

Learning Outcome: Discuss the total cost of quality and compare the common methods of managing quality

LO: 2.3: Discuss key quality improvement variables and how they combine to create a quality management system.

AACSB: Application of Knowledge

Type: Concept

96) Building a theoretical framework for quality management begins with \_\_\_\_\_.

A) engineering

B) operations

C) contingency

D) leadership

E) team building

Answer: D

Diff: 3

Learning Outcome: Discuss theoretical framework for managing quality

LO: 2.4: Assess a quality management system using the theoretical framework for quality management.

AACSB: Application of Knowledge

97) Strategic Planning is part of the framework for quality management.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss theoretical framework for managing quality

LO: 2.4: Assess a quality management system using the theoretical framework for quality

management.

AACSB: Application of Knowledge

Type: Concept

98) Supplier focus is part of the framework for quality management.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss theoretical framework for managing quality

LO: 2.4: Assess a quality management system using the theoretical framework for quality

management.

AACSB: Application of Knowledge

Type: Concept

99) Information analysis is core in the theoretical framework for quality management.

Answer: FALSE

Diff: 2

Learning Outcome: Discuss theoretical framework for managing quality

LO: 2.4: Assess a quality management system using the theoretical framework for quality

management.

AACSB: Application of Knowledge

Type: Concept

100) Leadership is core in the theoretical framework for quality management.

Answer: TRUE

Diff: 2

Learning Outcome: Discuss theoretical framework for managing quality

LO: 2.4: Assess a quality management system using the theoretical framework for quality

management.

AACSB: Application of Knowledge

101) Describe the theoretical framework for quality management.

Answer: Quality management begins with leadership. It is the responsibility of leaders in the organization to then drive quality assurance, employee involvement, and the creation of a corporate philosophy. It is important that there is a focus on the customer and that the core quality management systems are further supported by the ideas of breakthrough improvement, team building, information analysis, strategic planning, and other inputs from the quality department

Diff: 2

Learning Outcome: Discuss theoretical framework for managing quality

LO: 2.4: Assess a quality management system using the theoretical framework for quality

management.

AACSB: Application of Knowledge

Type: Application