
**THE
MANAGER OF QUALITY
ORGANIZATIONAL EXCELLENCE
SOLUTION TEXT**

**© 2010 by Glenn Gee, Wes Richardson &
Bill Wortman - All rights reserved**

6th Edition - July, 2010

SECTION III

STRATEGIC DEVELOPMENT - TEST QUESTIONS

- 3.1. The relevant stakeholders in an important project would typically include which of the following?
- The hourly employees and stockholders
 - Your potential competitors and their employees
 - Information technologists
 - Six sigma and lean consulting firms

Solution: The relevant stakeholders in any project are the stockholders, management, employees, suppliers, and customers. Potential competitors would not be stakeholders in a company project. Six sigma, lean consulting, and information technology might not be involved.

Answer a is correct.

Reference: *CMQ/OE Primer*, Section III - 20/21 and 25/26.

- 3.2. The term "metrics" most frequently refers to:
- A unit of measurement
 - The metric system
 - The science of weights and measurements
 - An evaluation method

Solution: This is a definition question. Answers **a** and **b** refer to a traditional form of measurement such as the metric system and are incorrect. Answer **c** is the definition for metrology. The modern definition of "metrics" is a form of measurement or evaluation (answer **d**).

Answer d is correct.

Reference: *CMQ/OE Primer*, Section III - 47/49.

- 3.3. Strategic management planning should include external environmental variables, EXCEPT for:
- Legal change
 - Unexpected war
 - Political change
 - Competition

Solution: Note that a negative response is requested. Strategic management planning should incorporate the following external environmental variables in the project plan: Legal change, political change, economic variables, social climate, competition, and market size. A company starting development of a new product would need to forecast competitive and market condition changes. They would also need to include legal changes such as new regulatory requirements for the product. The political changes may predict inflationary or recession conditions at the time the product is introduced. War is often beneficial to specific types of industries. However, unexpected war could not be foreseen by the company.

Answer b is the correct, incorrect, choice.

Reference: *CMQ/OE Primer*, Section III - 4/5 and 15 (and logic).

SECTION III

STRATEGIC DEVELOPMENT - TEST QUESTIONS

- 3.4. For organizations within the United States, compliance with the OSHA requirements is:
- Mandatory according to the Code of Federal Regulations
 - Desirable, but not legally required
 - Partially waived in selected states
 - Enforced by the EPA

Solution: A company must comply with local, state, federal, and industry regulations that address workplace safety concerns issues as well as product safety concerns. The Federal Occupational Safety and Health Administration (OSHA), through state agencies monitors workplace safety. OSHA sets and enforces regulatory guidelines on issues, such as required eye and ear protection, the operation of moving equipment and fire protection. Safety training in the areas of hazard communications, lockouts, tagouts, blood borne pathogens, etc. must be provided in many organizations. The Federal authority for OSHA is via the Code of Federal Regulations (CFR), specifically 29 CFR 1900.

Answer a is correct.

References: *CMQ/OE Primer*, Section III - 33 and 29 CFR 1900.

- 3.5. Which of the following constitutes a strategic quality goal?
- Answer customer complaints within two weeks
 - Reduce the scrap rate in the finishing department
 - Perform inspection checks on work in progress
 - Obtain a superior quality rating by customers and industry experts

Solution: Strategic quality goals are set by top management, while the tactical quality goals are established at the lower organizational levels. Answer **d** is a strategic goal. The other answers choices are tactical goals which might support a strategic goal.

Answer d is correct.

Reference: *CMQ/OE Primer*, Section III - 9 and 51/52 (and logic).

SECTION III

STRATEGIC DEVELOPMENT - TEST QUESTIONS

3.6. Strategic goals must be subdivided. Thus, they are:

- a. Delegated
- b. Distributed
- c. Accountable
- d. Deployed

Solution: The key question word is "subdivided." Delegated means to be assigned goals (answer **a**). Distributed means to be given goals (answer **b**). Accountable means to be responsible for the goals (answer **c**). Deployed means to have the goals spread out into attainable portions. Answer **d** is the best choice.

Answer d is correct.

Reference: *CMQ/OE Primer*, Section III - 43 (and logic).

3.7. What is the best reason for a plant manager to request a full plant assessment?

- a. He/she is convinced by a consultant that it is a good idea
- b. He/she feels that something is wrong
- c. The management team had solved many problems
- d. An assessment is needed every now and then

Solution: Each answer has some merit, but one is best. A full plant assessment can uncover many areas requiring improvement within a plant. The recommendation for an assessment could come from several sources, and any one of the answers could be valid. However, one should recognize that it is ultimately the plant manager who makes the decision to have an assessment. The plant manager will be familiar with the plant operations and can best judge if something is wrong (answer **b**). Answers **a**, **c** and **d** are weaker choices.

Answer b is correct.

Reference: *CMQ/OE Primer*, Section III - 28/29 (and logic).

SECTION III

STRATEGIC DEVELOPMENT - TEST QUESTIONS

- 3.8. Acceptable corporate quality goals are normally derived from:
- a. The quality department
 - b. Identified customer needs
 - c. Middle management objectives
 - d. The quality council

Solution: The key question phrase is "normally derived." Customer needs and top management objectives are key sources for corporate quality goals. The quality department and middle management goals are normally not included. These may not be a quality council.

Answer b is correct.

Reference: *CMQ/OE Primer*, Section III - 3, 8/9 and 51/52 (and logic).

- 3.9. Which of the following statements can properly be made regarding the objective: "Quality will be improved next year."
- a. It defines the measures of quality
 - b. This statement has a defined ending date
 - c. This statement details how the improvements will be made
 - d. It will be possible to evaluate if the objective was met

Solution: The ending date is somewhat defined since it must occur next year. The other statements are incorrect.

Answer b is correct.

Reference: *CMQ/OE Primer*, Section III - 41 and 51/53.

SECTION III

STRATEGIC DEVELOPMENT - TEST QUESTIONS

3.10. Lean manufacturing results in:

- a. Cutbacks in personnel and increased individual work loads
- b. Reduction in costs and improvements in resource efficiency
- c. Avoiding routine costs and extending maintenance intervals
- d. High utilization of machinery and labor

Solution: Lean manufacturing is a process innovation based on the Toyota Production System, that reduces the size and cost of inputs. Many existing manufacturing philosophies emphasize high utilization of machinery and labor, which results in waste with these systems.

Lean Manufacturing maximizes value added activities, while minimizing waste. NIST, through its nationwide MEP (Manufacturing Extension Partnership) system, has long been an advocate of Lean Manufacturing. There are over 400 support locations with coverage in all States. The manufacturer is facing competition on all fronts which requires a reduction of costs and an improvement in resource efficiency. Typical benefits as noted in the NIST website include:

Productivity improvements of 10-30%
Up to a 90% reduction in work-in-progress
A 50% increase in space utilization
An 85% quality improvement
Up to 90% reduction in lead times

Answer b is correct.

References: *CMQ/OE Primer*, Section III - 25 and Manufacturing Extension Partnership (MEP). (2000). A NIST program that is described online. Downloaded on November 8, 2000 from <http://www.mep.nist.gov>.

3.11. Performance data is collected from many sources: Data monitoring of the process, customer feedback, inspection personnel, operations personnel, staff specialists, and the like. How should one treat the data?

- a. Be sure instruments are always calibrated
- b. Develop a measurement system
- c. Remember Dr. Deming's "true value" statement
- d. Use experts to carefully analyze the data

Solution: It's great that a lot of data is being collected. In fact, probably more data is being collected than may be required. The last sentence throws us a curve with its question regarding treatment of data. Isn't all data good? Deming had some thoughts on the subject. Answers **a**, **b** and **d** are sensible ways to handle the collection and analysis of data. However, Dr. Deming stated that there is no such thing as a "true value" (answer **c**). One must be somewhat skeptical and understanding of the data before leaping to conclusions.

Answer c is considered correct.

Reference: *CMQ/OE Primer*, Section III - 48.

SECTION III

STRATEGIC DEVELOPMENT - TEST QUESTIONS

- 3.12. What is a benefit from an assessment?
- a. It provides a baseline analysis and some improvement ideas
 - b. It provides easier project financing
 - c. It eliminates embedded common cause problems
 - d. It confirms that the company is operating effectively

Solution: An assessment can provide the company with a baseline analysis and provide some ideas on improvements (answer **a**). It would not make the financing of projects easier (answer **b**). It does not eliminate common cause problems (answer **c**). It may confirm that a company is operating ineffectively (answer **d**).

Answer a is correct.

Reference: *CMQ/OE Primer*, Section III - 29/29.

- 3.13. During goal setting, American managers should now follow the lead of their Japanese counterparts for:
- a. Product quality
 - b. Product serviceability
 - c. Long term goals
 - d. Short term goals

Solution: Is there something wrong with American goal setting? Should we emulate our Japanese or European counterparts more? The objectives of either product quality (answer **a**) and product serviceability (answer **b**) continue to be good goals for all businesses. Americans have been accused of focusing on short term goals only (answer **d**). We do need to become more long term goal oriented (answer **c**). The best answer is definitely **c** when compared to our Japanese competitors.

Answer c is correct.

Reference: *CMQ/OE Primer*, Section III - 21.

SECTION III

STRATEGIC DEVELOPMENT - TEST QUESTIONS

- 3.14. According to Michael Porter, competitive forces of strategy include which of the following?
- The amicability of customers
 - The weakness of suppliers
 - Lack of services
 - The threat of new entrants

Solution: Professor Michael Porter of the Harvard Business School developed the five competitive forces of strategy as a way to analyze the marketplace and to gain a market advantage. It is maintained that current positioning is the heart of strategy. The five forces affect most industries and the analyst may have to conduct considerable research to determine the positioning of any individual company. The five competitive forces are:

- The Threat of New Entrants
- The Power of Customers
- The Power of Suppliers
- Substitute Products or Services
- Industry Rivalry

The amicability of customers has almost the opposite meaning as does the power of customers. Answers **b** and **c** are incorrect as stated.

Answer d is correct.

References: *CMQ/OE Primer*, Section III - 17 and Porter, M. (1979, March-April). "How Competitive Forces Shape Strategy." Harvard Business Review.

- 3.15. What would occur if the quality goals were not a part of the strategic plan?
- There would be no strategic goals
 - There would not be as much emphasis on quality
 - The total quality effort would not suffer
 - The quality department would still maintain the quality goals

Solution: Strategic goals could exist without a quality element. Therefore, answer **a** is not correct. Answer **b**, lack of emphasis, can occur. The total quality effort would possibly suffer if it is not part of the strategic plan. The quality effort needs commitment from top management. Therefore, answer **c** is not a correct statement. Quality department goals (answer **d**) would not be strategic in nature. The best choice is **b**.

Answer b is correct.

Reference: *CMQ/OE Primer*, Section III - 51/52 (and logic).

SECTION III

STRATEGIC DEVELOPMENT - TEST QUESTIONS

- 3.16. Criminal liability involving injury cases may be invoked in which of the following areas?
- a. Negligence or fraud
 - b. Lack of an appropriate warranty policy
 - c. Mountebank techniques
 - d. Delayed handling of complaints

Solution: A mountebank is a hawker of quack medicines who attracts customers with stories, jokes, or tricks. It is unlikely, although feasible, that criminal liability would be invoked for that reason. Negligence, fraud, and knowingly violating the law can all be grounds for imposing criminal liability. Answers **b** and **d** are poor business practices but are unlikely to be criminal.

Answer a is correct.

References: *CMQ/OE Primer*, Section III - 35/36 and *The American Heritage College Dictionary*, 3rd ed. Houghton Mifflin Company, Boston, MA.

- 3.17. Technical assessments would emphasize which of the following areas?
- a. The culture of the organization
 - b. How the internal reward systems operate
 - c. A financial analysis of the company
 - d. How people cooperate or conflict with each other

Solution: A technical assessment of a company is a broad area and deals with both technical and manufacturing issues. The culture of the organization (answer **a**) would not be covered by the assessment. Answers **b**, and **d** reflect behavior not technical assessments.

Answer c is correct.

Reference: *CMQ/OE Primer*, Section III - 29/31.