

SECTION III

STRATEGIC DEVELOPMENT - TEST QUESTIONS

- 3.1. The relevant stakeholders in an important project would typically include all of the following EXCEPT:
- The hourly employees
 - Your potential competitors
 - Your potential suppliers
 - The owners or stockholders

Solution: Note that a negative response is requested. The relevant stakeholders in any project are the stockholders, management, employees, suppliers, and customers. Potential competitors would not be stakeholders in a company project.

Answer b is the correct, incorrect, choice.

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

- 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).

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- 3.4. For organizations within the United States, compliance with the OSHA requirements is:
- a. Mandatory according to the Code of Federal Regulations
 - b. Desirable, but not legally required
 - c. Partially waived in selected states
 - d. 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 make up strategic quality goals?
- I. Commitment to the customer
 - II. The scrap rate in the finishing department
 - III. Performance inspection checks on work in progress
 - IV. A superior quality rating by industry experts
- a. I and II only
 - b. II and III only
 - c. I and IV only
 - d. III and IV only

Solution: Given four answers to choose from, the idea is to distinguish between the options in some manner. There are two broad scope (strategic) goals and two detailed (tactical) department goals listed. The strategic goals are items **I** and **IV**. The other two answers, items **II** and **III**, are more tactical in nature. Strategic quality goals are set by top management, while the tactical quality goals are established at the lower organizational levels.

Answer c is correct.

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

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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).

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3.8. Acceptable corporate quality goals are normally derived from:

- I. The quality department
 - II. Identified customer needs
 - III. Top management objectives
 - IV. The quality council
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- a. I and II only
 - b. II and III only
 - c. I and IV only
 - d. II and IV only

Solution: From the list of answers given, determine a combination that fits the question. The key question phrase is "normally derived." Customer needs (item II) is listed in three answers and seems critical. Top management objectives (item III) should definitely be included in the proper choice. Only answer **b** contains both customer needs and top management objectives.

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."

- I. This does not define the measures of quality
 - II. The statement needs a defined ending date
 - III. How the improvements will be made should be stated
 - IV. It will not be possible to evaluate if the objective was met
-
- a. I, II and III only
 - b. I, II and IV only
 - c. I, III and IV only
 - d. II, III and IV only

Solution: The ending date is defined since it must occur next year. The other statements are true. Note that items **I** and **IV** are true negative comments.

Answer c is correct.

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

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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.

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3.12. What is NOT a benefit from an assessment?

- a. Provides easier project financing
- b. Provides a baseline analysis
- c. Contributes some improvement ideas
- d. Gives the company a "check-up"

Solution: Note that a negative response is requested. An assessment can provide the company with a baseline analysis (answer **b**), provide ideas on improvements (answer **c**), and provide a checkup of the company (answer **d**). It would not make the financing of projects easier (answer **a**).

Answer a is the correct, incorrect choice.

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

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- 3.14. According to Michael Porter, competitive forces of strategy include all of the following EXCEPT:
- The amicability of customers
 - The power of suppliers
 - Substitute products or 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

Answer a 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).

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- 3.16. Criminal liability involving injury cases may be invoked in all of the following area EXCEPT:
- a. Negligence
 - b. Fraud
 - c. Mountebank
 - d. Knowingly violating a law

Solution: Note that a negative response is requested. 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.

Answer c is the correct, incorrect, choice.

References: *CMQ/OE Primer*, Section III - 35/36 and (1993) *The American Heritage College Dictionary*, 3rd ed. Houghton Mifflin Company, Boston, MA.

- 3.17. Technical assessments would LEAST emphasize which of the following areas?
- a. The culture of the organization
 - b. Overall business practices
 - c. A financial analysis of the company
 - d. The status of research and design

Solution: Note that a negative response is requested. 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 be least covered by the assessment. Answers **b**, **c** and **d** are covered in detail during a technical assessment.

Answer a is the correct, incorrect, choice.

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