# THE QUALITY TECHNICIAN SOLUTIONS TEXT

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# **QUALITY CONCEPTS -- TEST QUESTIONS**

- 2.1. Which of the following documents defines the specific quality practices, resources, and sequence of activities relevant to a particular product, project or fulfillment of a contract?
  - a. The quality plan
  - b. The quality manual
  - c. The quality cost report
  - d. The quality records

Solution: The quality manual states the quality policy and describes the quality system of the organization. The quality cost report provides data on how the quality system is functioning expressed in quantitative or financial terms. Quality records supply evidence that the product or service is meeting or not meeting the requirements. The quality plan sets out specific practices, resources, and sequence of activities relevant to a particular product, project, or contract.

# Answer a is correct.

Reference: CQT Primer, Section II - 7.

- 2.2. In case of conflict between contract specifications and shop practice:
  - a. Company procedures usually prevail
  - b. Good judgment should be exercised
  - c. The customer is always right
  - d. Contract specifications normally apply

<u>Solution</u>: When a contract is accepted, the contract requirements override existing specifications and most internal company practices. Answer **a** is not correct. The exercise of good judgment may not be specific enough. Answer **b** is not correct. The customer is always right is a well used expression, but contract specifications apply when there is a contract.

# Answer d is correct.

<u>References:</u> CQT Primer, Section II - 23. This question has been modified from an old published CQE exam.

# **QUALITY CONCEPTS -- TEST QUESTIONS**

- 2.3. The most desirable method of evaluating a supplier is:
  - a. A history evaluation
  - b. A survey evaluation
  - c. A questionnaire
  - d. Discussion with the quality manager on the phone

Solution: This question requires an answer review and logic. The key phrase is "most desirable."

An evaluation of a supplier's quality history (answer **a**) is the best answer. It reflects a supplier's performance over a longer period of time in a number of areas (quality, reliability, responsiveness, etc.).

A survey evaluation (answer **b**) is a valid answer. However, it is a snapshot of the supplier at one point in time.

Answers **c** and **d** are very weak. A supplier will present themselves in the best possible light in a questionnaire or over the phone.

### Answer a is correct.

<u>References:</u> CQT Primer, Section II - 13 (and logic). This question has been modified from an old published CQE exam.

- 2.4. Technical service to suppliers is:
  - a. A great public relations gesture when personnel are available
  - b. A greater benefit to the company than it is to the supplier
  - c. A support feature for which suppliers are normally charged
  - d. An optional luxury which is not a company responsibility

Solution: This question requires general knowledge of modern supplier relationships.

Although technical service is a good public relations gesture, answer  $\mathbf{a}$ , and a nice support feature for suppliers, answer  $\mathbf{c}$ , they are not the main reasons for providing this service. Smart companies should not see technical service as an optional luxury, answer  $\mathbf{d}$ , but as a valuable resource to help insure the quality of incoming products. Answer  $\mathbf{b}$ , greater benefit to the company than it is to the supplier, is the best choice.

# Answer b is correct.

Reference: CQT Primer, Section II - 13/16 (and logic).

### **QUALITY CONCEPTS -- TEST QUESTIONS**

- 2.5. Helping a supplier develop an effective quality assurance system is:
  - a. Often, the best way to solve material problems
  - b. Intended for service organizations only
  - c. Costly and should generally be avoided
  - d. The sole responsibility of top management

<u>Solution:</u> Helping a supplier develop an effective quality assurance system is often the best way to solve material problems.

# Answer a is correct.

Reference: CQT Primer, Section II - 13/16.

- 2.6. Customer specifications are considered to be:
  - a. Similar to processing techniques
  - b. Secondary to National and International Standards
  - c. Contained in sales volume forecasts
  - d. Mandatory requirements

<u>Solution</u>: Customer specifications are mandatory requirements. They may or may not contain processing techniques. They can be independent of National or International Standard requirements.

# Answer d is correct.

Reference: CQT Primer, Section II - 22/23.

- 2.7. When purchasing materials from vendors, it is sometimes advantageous to choose vendors whose prices are higher because:
  - a. Materials which cost more can be expected to be better
  - b. Such vendors may become obligated to bestow special favors
  - c. Such a statement is basically incorrect. Always buy at the lowest price
  - d. The true cost of purchased materials may be lower

<u>Solution</u>: Materials which cost more can be expected to be better is certainly not always true. It is not good business practice to make vendors feel obligated to bestow special favors. This concept might put a purchasing manager in jail without positively affecting quality at all. Always buying at the lowest price goes against good quality practices. When purchasing materials from vendors, it is sometimes advantageous to choose vendors whose prices are higher because the total cost may be lower.

# Answer d is correct.

References: CQT Primer, Section II - 13/15. This question has been modified from an old published CQE exam.

# **QUALITY CONCEPTS -- TEST QUESTIONS**

- 2.8. Quality levels when make or buy decisions are made are typically:
  - a. Formulated before the design is finished
  - b. Based on production work loads
  - c. Set irrespective of make or buy decisions
  - d. Dependent on available procurement sources

<u>Solution</u>: Quality levels are not formulated before the design is finished nor are they dependent on the available procurement sources. Production work loads may determine when a product is going to be produced but they have little to do with required quality levels. That is, the quality level should be independent of whether the product is made internally or externally. Quality levels are set irrespective of make or buy decisions.

# Answer c is correct.

Reference: CQT Primer, Section II - 13/14.

- 2.9. When buying materials and other items from outside sources it is best to:
  - a. Reduce the number of sources for a given item consistent with the law, and quality and scheduling protection
  - b. Increase the number of qualified suppliers to assure quality, schedule, and price protection
  - c. Maintain a large list of qualified vendors, but emphasize local supplier purchases
  - d. Buy parts from Japanese and German sources (where price permits) because their tolerances are better

<u>Solution:</u> Increasing the number of qualified suppliers to assure quality, schedule and price protection (**b**) does not necessarily assure quality but could increase the variation entering the system. Buying from local suppliers when possible © may be handy but does not assure quality. Just because materials are purchased from Japanese and German sources (**d**) does not necessarily mean their tolerances or parts are better. According to Dr. Deming, one should reduce the number of sources for a given item consistent with the law, and scheduling protection to minimize variation which negatively impacts quality.

### Answer a is correct.

Reference: CQT Primer, Section II - 13/15 (and logic).

- 2.10. Quality policies are principally issued by management to:
  - a. State the position of the company on quality
  - b. Ensure people are reminded about quality
  - c. Provide detailed instructions in regard to quality
  - d. Ensure customer satisfaction

<u>Solution:</u> Answer **a** is a good choice. Answer **b** is very weak. Management should lead by example, as well as by policy. Answer **c**, regarding detailed instructions, is definitely not the correct answer. Answer **d**, to ensure customer satisfaction, is not accomplished through policy.

### Answer a is correct.

Reference: CQT Primer, Section II - 19.