



QUIZ – UNDERSTANDING ISO/IEC 17025

Name: _____ Place: _____

Date: _____

Section 1 – True/False

Each question is worth 1 mark

The quiz questions below are to be answered with a **T** (True) or **F** (False) in the box provided.

Answer

- | | |
|--|--|
| 1. Conformity of Process is one of the principles behind ISO/IEC 17025 | |
| 2. A quality system that conforms to ISO/IEC 17025 includes a program for continual improvement. | |
| 3. The aim of Clause 8.3, - Document Control, is to minimize unnecessary distribution of procedures. | |
| 4. Document control puts the right document into the right hands. | |
| 5. Records do not need to be controlled – only documents. | |
| 6. Continual improvement requires a laboratory to identify and track corrective action. | |
| 7. All parts of a laboratory quality system must be documented | |
| 8. Opportunities for improvement do not need to be identified or tracked. | |
| 9. Preventive action and corrective action can follow the same approach | |
| 10. Continual improvement includes procedures for conducting internal audits | |
| 11. Management review does not need the input of top management | |
| 12. Internal audits are only necessary for the years the laboratory is not assessed. | |
| 13. Accommodations and equipment must always be monitored to prevent invalidation of test results | |
| 14. Samples do not need to be tracked throughout the laboratory | |
| 15. It is not possible to specify how a client must conduct sampling | |
| 16. If the method has been published in a standard, it does not need to be validated. | |
| 17. Uncertainties must be estimated for all non-numerical measurements. | |
| 18. Laboratories can estimate uncertainties using statistical methods. | |
| 19. "Uncertainty" is not a component of the Decision Rule. | |
| 20. Auditors and assessors should have access to all personnel records during the conduct of their audits/assessments. | |

Section 2 – Multiple Choice

Each question is worth 1 mark

Circle the correct answer for each question in this Section. There is only **one correct** answer for each question.

21. A quality manager (or management representative) is a staff member who has responsibility for the laboratory quality system, its implementation and who, in this capacity:
- a. Approves internal audit schedules.
 - b. Arranges for the training of auditors.
 - c. Sets laboratory quality objectives.
 - d. Reports directly to top management.

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22. A master document list is required to record the following:
- Location and status of only lab documents
 - Identification and approval of all external documents
 - Determine the expected duration of the validity of a document
 - Location and status of all documents used in the lab that are referenced in the quality system
23. The following feedback mechanisms are required in 17025:
- Publish all feedback on the website.
 - Record all feedback
 - Respond to all feedback
 - Ignore all feedback
24. Management review, according to ISO/IEC 17025, requires examination of how many different issues/items:
- 7
 - 13
 - 11
 - 19
25. Which requirement specifically states the frequency of laboratory internal audits?
- 17025 does not specify a frequency for internal audits.
 - Clause 8.8 of ISO/IEC 17025
 - Clause 8.7 of ISO/IEC 17025
 - Our accreditation body interprets APLAC TC 002 to require labs to undertake internal audit every year
26. What are some of the considerations in metrological traceability?
- Specification of the measurand, unbroken chain of measurement, use of appropriate methods.
 - Systematic error, use of appropriate decision rule, use of OIML R 111 class weights.
 - Self-declaration of competence, unbroken chain of measurement, specification of the measurand.
 - CIPM MRA, Joint Declaration on Legal Metrology, unbroken chain of measurement.
27. Why is the standard called ISO/IEC 17025 and not ISO 17025?
- IEC paid money to the ISO to publish it
 - IEC participates with ISO in its development as part of CASCO
 - ISO is not the real copyright holder of ISO/IEC 17025
 - ILAC insisted that ISO allow the IEC name to appear in the standard
28. What is the meaning of the term ISO?
- It is an acronym for the International Standardization Organization.
 - It is the acronym for the International Standards Organization
 - It is the Greek for “the same” or “equal.”
 - It means that the organization is really isolated from government influence

29. What is the aim of ISO/IEC 17025?

- a. It is to allow governments to accredit laboratories
- b. It is to provide the tools that allow laboratories to produce consistent, technically valid results.
- c. It is to allow laboratories to enter foreign markets
- d. It is to force laboratories to use quality systems

30. Traceability of measurement applies to:

- a. calibration laboratories only
- b. only physical measurement devices only
- c. all measurement devices and certified reference materials and standards
- d. all equipment which contributes to the overall uncertainty of the measurement.

31. ISO/IEC 17025 contains the following types of requirements:

- a. Management system and technical requirements
- b. Management system and process requirements
- c. Quality system and technical requirements
- d. Leadership and management requirements

32. Accreditation bodies conduct laboratory assessments:

- a. Against ISO/IEC 17025 alone
- b. Against ISO 9001 alone
- c. Against ISO/IEC 17011 and ISO/IEC 17025
- d. Against ISO/IEC 17025 and other accreditation requirements documents

33. The Principle of “Capacity” is described as:

- a. The people with the skills and knowledge,
- b. The environment with the facilities and equipment
- c. The quality control and the procedures
- d. All of the above.

34. Traceability includes three components for each step in the traceability chain:

- a. Uncertainty, calculation, documentation
- b. Calibration, uncertainty, traceability
- c. Documentation, registration, reference to the SI
- d. Calibration, uncertainty, competence

35. Documents and records acquired or created during testing and calibration work:

- a. Are the property of the client.
- b. Are to be retained for future reference by the assessors.
- c. Are to be sent to the accreditation body
- d. Are to demonstrate conformance to laboratory procedures.

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36. Once a non-conforming condition is **observed**, the laboratory should first:
- Determine the level of conformance of the process when compared to requirements
 - Find as many non-conformances as possible
 - Understand the process under review as it is understood by the person responsible for it
 - Allocate blame for the non-conformance
37. Internal audits are conducted to determine:
- The conformance of laboratory operations to its own QMS and 17025
 - The conformance of laboratory operations with ISO 9001
 - The financial stability of the laboratory
 - The best suppliers of reference materials
38. The following are Principles behind ISO/IEC 17025:
- Impartiality of Conduct, Objectivity of Results, Transparency, Process Approach
 - Scientific Method, Capacity, Customer Focus, Objectivity of Results,
 - Involvement of People, Exercise of Responsibility, Transparency, Traceability of Measurement
 - Scientific Method, Objectivity of Results, Transparency, Traceability of Measurement
39. The VIM definition of Measurement Traceability includes the following components:
- Uncertainty of measurement, calculation, reference to the SI, documentation
 - Calibration intervals, uncertainty of measurement, unbroken chain of comparisons, competence
 - Documentation, registration, reference to the SI, calibration intervals
 - Reference to the SI, calibration intervals, resolution of measurement, competence
40. The object of the Decision Rule is:
- Determine the level of conformance of the object of testing/calibration to the specification
 - Relieve the client of responsibility in making compliance statements
 - Explain the lab result to a person not knowledgeable of the science
 - Protect the health, safety, and welfare of users of the object of testing/calibration.