### **Section 1 – True/False Each question is worth 2 marks**

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

**Answer**

|  |  |  |
| --- | --- | --- |
|  | **True** | **False** |
| 1. A management system that conforms to ISO/IEC 17025:2017 includes consideration of risk assessment
 | [ ]  | [ ]  |
| 1. All parts of a laboratory management may be documented either electronically or on paper
 | [ ]  | [ ]  |
| 1. Management review does not need the input of top management
 | [ ]  | [ ]  |
| 1. Internal audits are only necessary for the years the laboratory is not assessed.
 | [ ]  | [ ]  |
| 1. Samples do not need to be tracked throughout the laboratory
 | [ ]  | [ ]  |
| 1. It is not required to specify how a client conducts sampling
 | [ ]  | [ ]  |
| 1. If the method has been published in a standard, it does not need to be validated.
 | [ ]  | [ ]  |
| 1. Uncertainties can be evaluated for non-numerical measurements.
 | [ ]  | [ ]  |
| 1. Laboratories must include evaluation of uncertainties in statements of compliance
 | [ ]  | [ ]  |
| 1. “Uncertainty” is not a component of the Decision Rule.
 | [ ]  | [ ]  |

### **Section 2 – Multiple Choice Each question is worth 4 marks**

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

|  |  |
| --- | --- |
|  | **Check one** |
| 1. A staff member is needed who has authority and resources for the following:
 |  |
| Implementation of the management system. | [ ]  |
| Identification of deviations from the management system. | [ ]  |
| Reporting to management on the performance of the management system. | [ ]  |
| All of the above. | [ ]  |
|  |  |
| 1. The following are the clauses in the 2017 version of the standard that contain requirements:
 |  |
| 2,3,5,7,9 | [ ]  |
| 4,5,6,7,8 | [ ]  |
| 2,3,4,5 | [ ]  |
| Only clauses 6 and 7 have requirements | [ ]  |
|  |  |
| 1. The following feedback mechanisms are required in 17025:2017:
 |  |
| Publish all feedback on the website. | [ ]  |
| Record all complaints | [ ]  |
| Analyse all feedback | [ ]  |
| Ignore all feedback | [ ]  |

|  |  |
| --- | --- |
| 1. Management review, according to ISO/IEC 17025:2017, requires examination of how many different issues/items **overall**:
 |  |
| 7 | [ ]  |
| 13 | [ ]  |
| 11 | [ ]  |
| 19 | [ ]  |
|  |  |
| 1. 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 17025:2017 | [ ]  |
| Clause 8.7 of ISO/IEC 17025:2017 | [ ]  |
| IAS interprets APLAC TC 002 to require labs to undertake internal audit every year | [ ]  |
|  |  |
| 1. What does 17025:2017 require as considerations in metrological traceability to the SI?
 |  |
| Competence in calibration, unbroken chain of measurement, contribution of uncertainty. | [ ]  |
| 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. | [ ]  |
| 1. Why is the standard called ISO/IEC 17025:2017 and not ISO 17025:2017?
 |  |
| 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 | [ ]  |
|  |  |
| 1. What is the definition of the term “Impartiality”?
 |  |
| Absence of partiality | [ ]  |
| Lack of conflict of interest | [ ]  |
| Presence of objectivity | [ ]  |
| “freedom from bias”, “lack of prejudice”, “neutrality” | [ ]  |
|  |  |
| 1. What is the purpose of ISO/IEC 17025:2017?
 |  |
| It is to allow governments to accredit laboratories | [ ]  |
| It is to provide the tools that allow laboratories to produce consistent, technically valid results. | [ ]  |
| It is to allow laboratories to enter foreign markets | [ ]  |
| It is to force laboratories to use quality systems | [ ]  |
|  |  |
| 1. The concept metrological traceability in 17025:2017 applies to:
 |  |
| calibration laboratories only | [ ]  |
| only physical measurement devices | [ ]  |
| only measurement devices and certified reference materials and standards | [ ]  |
| all equipment which contributes to the overall uncertainty of the measurement result. | [ ]  |
|  |  |
| 1. ISO/IEC 17025:2017 contains the following types of requirements:
 |  |
| 1. Management system and technical requirements
 | [ ]  |
| 1. Management system and process requirements
 | [ ]  |
| 1. Quality system and technical requirements
 | [ ]  |
| 1. Leadership and management requirements
 | [ ]  |

|  |  |
| --- | --- |
| 1. Accreditation bodies conduct laboratory assessments:
 |  |
| 1. Against ISO/IEC 17025 alone
 | [ ]  |
| 1. Against ISO 9001 alone
 | [ ]  |
| 1. Against ISO/IEC 17011 and ISO/IEC 17025
 | [ ]  |
| 1. Against ISO/IEC 17025 and other accreditation requirements documents
 | [ ]  |
|  |  |
| 1. When receiving a request for new work, the laboratory, according to 17025:2017, shall:
 |  |
| 1. Determine its capability in doing the work.
 | [ ]  |
| 1. Determine if it has the resources to do the work.
 | [ ]  |
| 1. Confirm the method is fit for customer purpose.
 | [ ]  |
| 1. All of the above.
 | [ ]  |
|  |  |
| 1. Traceability includes three components for each step in the traceability chain:
 |  |
| 1. Uncertainty, calculation, documentation
 | [ ]  |
| 1. Competence in calibration, uncertainty, traceability
 | [ ]  |
| 1. Documentation, registration, reference to the SI
 | [ ]  |
| 1. Competence in calibration, uncertainty, reference to the SI
 | [ ]  |
|  |  |
| 1. Documents and records acquired or created during testing and calibration work:
 |  |
| 1. Are the property of the client of the lab.
 | [ ]  |
| 1. Are to be retained for future reference by the accreditation body assessors.
 | [ ]  |
| 1. Are to be sent to the accreditation body
 | [ ]  |
| 1. Are to enable the repetition of the activity as close as possible to the original.
 | [ ]  |
|  |  |
| 1. Once a non-conforming condition is **observed**, the laboratory should first:
 |  |
| 1. Take action to control and correct it.
 | [ ]  |
| 1. Find as many non-conformances as possible
 | [ ]  |
| 1. Understand the process under review as it is understood by the person responsible for it
 | [ ]  |
| 1. Allocate blame for the non-conformance
 | [ ]  |
|  |  |
| 1. Infernal audits are conducted to determine:
 |  |
| 1. The conformance of laboratory operations to its own QMS and ISO/IEC 17025:2017
 | [ ]  |
| 1. The conformance of laboratory operations with ISO 9001
 | [ ]  |
| 1. The financial stability of the laboratory
 | [ ]  |
| 1. The best suppliers of reference materials
 | [ ]  |
|  |  |
| 1. The following are two options for a lab to implement a Management System:
 |  |
| 1. Get certified to ISO 9001 – self-declare conformance to ISO/IEC 17025:2017
 | [ ]  |
| 1. Get accredited to ISO/IEC 17025:2017 – self-declare conformance to ISO 9001
 | [ ]  |
| 1. Self-declare conformance to 17025:2017 – self-declare conformance to ISO 9001
 | [ ]  |
| 1. All of the above.
 | [ ]  |
|  |  |
| 1. A lab must meet all of the following requirements to demonstrate conformance to 17025:2017:
 |  |
| 1. Demonstrate the consistent achievement of the requirements of 17025:2017 and assuring the quality of the laboratory results.
 | [ ]  |
| 1. Meeting the requirements of Clauses 4 to 7 of 17025:2017.
 | [ ]  |
| 1. Implement a management system in accordance with Options A or B of 17025:2017.
 | [ ]  |
| 1. All of the above.
 | [ ]  |

|  |  |
| --- | --- |
|  |  |
| 1. The object of the Decision Rule is:
 |  |
| 1. Determine the level of conformance of the object of testing/calibration to the specification
 | [ ]  |
| 1. Relieve the client of responsibility in making compliance statements
 | [ ]  |
| 1. Explain the lab result to a person not knowledgeable of the science
 | [ ]  |
| 1. Protect the health, safety, and welfare of users of the object of testing/calibration.
 | [ ]  |