

1. The closeness of agreement between independent test/measurement results obtained under stipulated conditions is known as:

- a. Specificity
- b. Precision
- c. Accuracy
- d. Selectivity
- e. I don't know

2. The ability of a method to respond exclusively to the substance for which the method is being used is known as:

- a. Sensitivity
- b. Specificity
- c. Limit of detection
- d. Scope
- e. I don't know

3. A z score greater than 1 indicates:

- a. Unsatisfactory result that requires corrective action
- b. Satisfactory results
- c. Satisfactory result if it is lower than 2
- d. Unsatisfactory result that doesn't require corrective action
- e. I don't know

Responses a if z is above 3, b and c if z is below 2, and d if z is between 2 and 3.

4. An official method has typically been validated in:

- a. At least one laboratory specializing in the field
- b. At least 4 laboratories, no matter where they are located
- c. A number of laboratories using instruments from the same vendor
- d. A number of laboratories using instruments from different vendors
- e. A number of laboratories greater than 12
- f. I don't know

Responses a (for type 1 method), b (for type 2 method). e is tricky: 8 laboratories are mandatory for type 4 methods but if you want to eliminate some lab results, you better ask more than 8 laboratories.

5. A representative matrix included in a method means that: (select all that apply)

- a. The method works for this matrix
- b. The method works for all matrices in the same group (if specified)
- c. The method should work for all matrices in the same group
- d. The method doesn't need to be validated to be used with other matrices
- e. I don't know

6. When an LC/MS/MS method has undergone multi-laboratory validation, it can be used in one's laboratory: (select all that apply)

- a. Without a need to validate
- b. Without standards to match retention time (a library match is sufficient)
- c. With a verification (or single validation laboratory)
- d. With a similar instrument from a different vendor
- e. By certified analysts

7. This score combines an estimate of the error of a result with a standard deviation

- a. Repeatability score
- b. Reproducibility score
- c. Z score
- d. S score
- e. I don't know

8. ISO 17025:2017 is a requirement for all laboratories.

- a. True
- b. False
- c. I don't know

9. All laboratories performing analyses for international trade must use the same method at the regulatory agency in the importing country.

- a. True
- b. False
- c. I don't know

10. An importing country government can obtain confidence in the reliability of the results produced in a laboratory that reports results through: (select all that apply)

- a. An inspection
- b. An ISO accreditation to standard 17025
- c. A proficiency testing round that they administer to these laboratories
- d. The laboratory's registration status in its country
- e. None of the above