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Practice MCQ For Govt Pharmacist Exam, in this article we will solve, Practice MCQ on the topic errors under the subject pharmaceutical analysis of first semester. Read following article for your reference.

Errors In Pharmaceutical Analysis » PHARMACAREERS

1.In the context of pharmaceutical analysis, what is the term for the difference between a measured value and the true or accepted value?

- A) Precision
- B) Error
- C) Accuracy
- D) Tolerance

2.Which of the following statements about systematic errors is true?

- A) They can be reduced through repeated measurements.
- B) They are random and unpredictable.
- C) They result from fluctuations in environmental conditions.
- D) They do not affect the accuracy of measurements.

3.What type of error occurs when a pharmaceutical analyst consistently misreads the meniscus while measuring the volume of a solution in a graduated cylinder?

- A) Systematic error
- B) Random error
- C) Instrumental error
- D) Human error

4.In pharmaceutical analysis, which term describes the degree of closeness between a measured value and the true or accepted value?

- A) Precision
- B) Error
- C) Accuracy
- D) Tolerance



Pharmacareers.in 5.Which of the following is an example of a random error in pharmaceutical analysis?

- A) Calibrating an analytical balance incorrectly
- B) Mislabeling reagent bottles
- C) Variability in temperature during a titration
- D) Inconsistent technique in weighing samples

6.When performing measurements in pharmaceutical analysis, which of the following is a method to minimize systematic errors?

- A) Conduct measurements in varying environmental conditions.
- B) Use instruments that are not properly calibrated.
- C) Perform measurements only once to save time.
- D) Calibrate instruments regularly and consistently.

7. How are significant figures used to convey the precision of a measurement?

- A) The more significant figures, the lower the precision.
- B) Significant figures indicate the accuracy, not precision.
- C) The more significant figures, the higher the precision.
- D) Significant figures have no relation to precision.

8.In pharmaceutical analysis, if a balance is accurate to the nearest 0.1 mg (milligram), how many significant figures are there in a measurement of 2.35 mg?

- A) 1 significant figure
- B) 2 significant figures
- C) 3 significant figures
- D) 4 significant figures

9.Which of the following best represents the concept of precision in measurement?

- A) Consistency in repeated measurements
- B) The absolute value of an error
- C) The closeness to the true value
- D) The range of possible values



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10.What type of error occurs due to limitations in the measuring instrument itself?

- A) Systematic error
- B) Random error
- C) Instrumental error
- D) Human error

11.Which of the following methods can help minimize systematic errors in pharmaceutical analysis?

- A) Using instruments without calibration
- B) Conducting measurements in varying environmental conditions
- C) Calibrating instruments regularly and consistently
- D) Performing measurements only once to save time

12.What type of error occurs when a pharmaceutical analyst consistently misreads the meniscus while measuring the volume of a solution in a graduated cylinder?

- A) Systematic error
- B) Random error
- C) Instrumental error
- D) Human error

13.To improve precision, one should:

- A) Use instruments with wider measurement ranges
- B) Increase the number of significant figures
- C) Repeat measurements and calculate the average
- D) Ignore random errors

14. Which term describes the degree of closeness between a measured value and the true or accepted value?

- A) Precision
- B) Error
- C) Accuracy
- D) Tolerance



15.What is the purpose of using significant figures in conveying measurement precision?

- A) To indicate the accuracy
- B) To enhance the color change
- C) To specify the closeness of measurements
- D) To prevent precipitation

16.Which of the following best represents the concept of precision in measurement?

- A) Consistency in repeated measurements
- B) The absolute value of an error
- C) The range of possible values
- D) The closeness to the true value

17.What type of error occurs due to limitations in the measuring instrument itself?

- A) Systematic error
- B) Random error
- C) Instrumental error
- D) Human error

18.Which of the following statements about systematic errors is true?

- A) They can be reduced through repeated measurements.
- B) They are random and unpredictable.
- C) They result from fluctuations in environmental conditions.
- D) They do not affect the accuracy of measurements.

19.In pharmaceutical analysis, if a balance is accurate to the nearest 0.1 mg (milligram), how many significant figures are there in a measurement of 2.35 mg?

- A) 1 significant figure
- B) 2 significant figures
- C) 3 significant figures
- D) 4 significant figures



20.What is the term used to specify the closeness of two or more measurements?

- A) Precision
- B) Error
- C) Accuracy
- D) Tolerance

21.What is the term for the difference between a measured value and the true or accepted value in pharmaceutical analysis?

- A) Precision
- B) Error
- C) Accuracy
- D) Tolerance

22.Which of the following statements about systematic errors is true?

- A) They can be reduced through repeated measurements.
- B) They are random and unpredictable.
- C) They result from fluctuations in environmental conditions.
- D) They do not affect the accuracy of measurements.

23.What type of error occurs when a pharmaceutical analyst consistently misreads the meniscus while measuring the volume of a solution in a graduated cylinder?

- A) Systematic error
- B) Random error
- C) Instrumental error
- D) Human error

24.In pharmaceutical analysis, which term describes the degree of closeness between a measured value and the true or accepted value?

- A) Precision
- B) Error
- C) Accuracy



D) Tolerance

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25. How are significant figures used to convey the precision of a measurement?

- A) The more significant figures, the lower the precision.
- B) Significant figures indicate the accuracy, not precision.
- C) The more significant figures, the higher the precision.
- D) Significant figures have no relation to precision.

26.What is the purpose of using significant figures in conveying measurement precision?

- A) To indicate the accuracy
- B) To specify the closeness of measurements
- C) To prevent precipitation
- D) To enhance the color change

27.If a balance is accurate to the nearest 0.1 mg (milligram), how many significant figures are there in a measurement of 2.35 mg?

- A) 1 significant figure
- B) 2 significant figures
- C) 3 significant figures
- D) 4 significant figures

28.Which of the following best represents the concept of precision in measurement?

- A) Consistency in repeated measurements
- B) The absolute value of an error
- C) The range of possible values
- D) The closeness to the true value

29.What type of error occurs due to limitations in the measuring instrument itself?

- A) Systematic error
- B) Random error
- C) Instrumental error



D) Human error

30. Which of the following terms refers to the average of a set of measurements?

- A) Precision
- B) Accuracy
- C) Error
- D) Tolerance

Answers

- 1. In the context of pharmaceutical analysis, the term for the difference between a measured value and the true or accepted value is **error**.
- The true statement about systematic errors is that they do not affect the accuracy of measurements.
- 3. When a pharmaceutical analyst consistently misreads the meniscus while measuring the volume of a solution in a graduated cylinder, it is an example of a **systematic error**.
- 4. In pharmaceutical analysis, the term that describes the degree of closeness between a measured value and the true or accepted value is **accuracy**.
- 5. An example of a random error in pharmaceutical analysis is **variability in temperature during a titration**.
- 6. A method to minimize systematic errors in pharmaceutical analysis is to **calibrate instruments regularly and consistently**.
- Significant figures are used to convey the precision of a measurement in such a way that the more significant figures, the higher the precision.
- 8. In pharmaceutical analysis, if a balance is accurate to the nearest 0.1 mg (milligram), there are **3 significant figures in a measurement of 2.35 mg**.
- The concept of precision in measurement is best represented by consistency in repeated measurements.
- 10. The type of error that occurs due to limitations in the measuring instrument itself is an **instrumental error**.
- 11. To minimize systematic errors in pharmaceutical analysis, one can calibrate instruments regularly and consistently.



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- 12. When a pharmaceutical analyst consistently misreads the meniscus while measuring the volume of a solution in a graduated cylinder, it is an example of a **systematic error**.
- 13. To improve precision, one should repeat measurements and calculate the average.
- 14. In pharmaceutical analysis, the term that describes the degree of closeness between a measured value and the true or accepted value is **accuracy**.
- 15. The purpose of using significant figures in conveying measurement precision is **to specify the closeness of measurements**.
- 16. The concept of precision in measurement is best represented by **consistency in repeated measurements**.
- 17. The type of error that occurs due to limitations in the measuring instrument itself is an **instrumental error**.
- The true statement about systematic errors is that they do not affect the accuracy of measurements.
- 19. In pharmaceutical analysis, if a balance is accurate to the nearest 0.1 mg (milligram), there are **3 significant figures in a measurement of 2.35 mg**.
- 20. The term used to specify the closeness of two or more measurements is precision.
- 21. In pharmaceutical analysis, the term for the difference between a measured value and the true or accepted value is **error**.
- 22. The true statement about systematic errors is that they **do not affect the accuracy of measurements**.
- 23. When a pharmaceutical analyst consistently misreads the meniscus while measuring the volume of a solution in a graduated cylinder, it is an example of a **systematic error**.
- 24. In pharmaceutical analysis, the term that describes the degree of closeness between a measured value and the true or accepted value is **accuracy**.
- 25. Significant figures are used to convey the precision of a measurement in such a way that **the more significant figures, the higher the precision**.
- 26. The purpose of using significant figures in conveying measurement precision is **to specify the closeness of measurements**.
- 27. If a balance is accurate to the nearest 0.1 mg (milligram), there are **3 significant figures in a** measurement of **2.35 mg**.
- 28. The concept of precision in measurement is best represented by **consistency in repeated measurements**.
- 29. The type of error that occurs due to limitations in the measuring instrument itself is an **instrumental error**.



Pharmacareers.in 30. The term that refers to the average of a set of measurements is **accuracy**.

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