4/F Board of Investments (BOI) Bldg., 385 Sen. Gil Puyat Avenue, Makati City 1200, Philippines
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Upgraded NPAL's Chemist and Inspectors Knowledge and development of statistical design on sampling used for Field and Market Monitoring for fruits and vegetable.

From 01. To 03. of December in Baguio City, Philippines

Some Final Questions about Sampling Statistics (please tick one answer or many, none if you think none of the proposed answers do apply or if you don't know.) Think of these questions as of a self-assessment not as a test (results will be kept strictly anonymous)

1. In Sampling the essential thinking is that we are arguing from a sample proportion to a population proportion, i.e. we measure and analyze the sample to find out about the population. How do we call this reasoning:
   a. Induction ■
   b. Deduction ☐
   c. Regression ☐

2. What is statistical inference?
   a. Drawing conclusions by applying clues of logic or statistics to observations or hypotheses ■
   b. Free association ☐
   c. For lacking verbal argumentation, we choose statistical formulas ☐
   d. Another way to impress the public ☐
   e. Associative inference deals with associations, relationships, etc.--but not with causal connections--between variables ■

3. Random sampling method is used to
   a. avoid going through a complicated selection procedure ☐
   b. give each member of the population an equal chance of being included in the sample ■
   c. select items (often called units) from a population where the probability of choosing a specific item is the proportion of those items in the population. ■

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4. Stratified sampling method is used to

   a. may reduce the sample size considerably
   b. to avoid random sampling
   c. divide the members of the population into homogeneous subgroups before sampling.

5. How many strata are used best in stratified sampling ?

   a. As many as can be justified economically
   b. About 5 to 15
   c. As many as are proportional to the size of the sample size divided by the universe

6. What is a probability distribution of a sample / universe?

   a. A number to indicate how many items are distributed in the sample
   b. A graphical representation of the sample within the universe
   c. A probability distribution assigns a probability to each measurable subset of the possible outcomes of a random experiment, survey.

7. Let us refer to some concepts of sampling techniques: Why testing?

   a. Because statistical reasoning is based on assumptions?
   b. To prove the veracity of these assumptions
   c. The data we collect often requires to be compared and when comparisons have to be made, we must take into account the fact that our data is collected from a sample of the population and is subject to errors

8. Did you ever hear of hypothesis and of errors in testing and of which?

   a. H_0 Hypothesis
   b. H_1 Hypothesis
   c. Type I Error
   d. Type II Error

9. Confidence intervals are used to

   a. increase the confidentiality of samples
   b. to avoid random sampling
   c. indicate a numerical range with a probability. We must concede the possibility that we are wrong.

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10. Which of the following examples are randomized samples?
    a. Rainfall data delivered by the Meteorological Institute
    b. Reports of people on Landslides
    c. Pesticide occurrence measured by reports of hospital cases

11. Which of the following statements are true? ?
    a. A t-test can make inference about the difference of two means
    b. A t-test is any statistical hypothesis test in which the test statistic follows a Student's t distribution
    c. The Student's t distribution is independent of the sample size

12. What does the statistical regression do?
    a. Regression explains the cause of one event by observing others
    b. If the regression equation expresses mathematically a linear relationship, we speak of linear regression
    c. With regression functions we can predict the future
    d. Regression functions allow predictions under certain statistical preconditions

13. Which of the following remarks are on confidence intervals are correct?
    a. Confidence intervals relate the quality of predictions with observed distribution of the sample
    b. It is better not to publish confidence intervals because nobody understands them anyway
    c. Confidence Intervals are always related to a confidence level (a probability)

14. If we want to interpret statistical results, which of the following remarks are correct?
    a. We say that once an official statistic is published, it must be correct, even if we don't know much about the calculation of this statistic
    b. The interpretation of statistical results should improve the reasoning for more profound research to improve Pesticide control in general
    c. The current use of the interpretation of statistical results is sufficient for Pesticide control in general

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