IGWE OBINNA DANIEL

Pharmacology

18/MHS07/054

STA 312

Assignment

1. What do you understand by hypothesis testing?

Hypothesis testing is an act in statistics whereby an analyst tests an assumption regarding a population parameter. The methodology employed by the analyst depends on the nature of the data used and the reason for the analysis.

Hypothesis testing is used to assess the plausibility of a hypothesis by using sample data. Such data may come from a larger population, or from a data-generating process. The word “population” will be used for both of these cases in the following descriptions.

1. Differentiate between the classical and the p-value approach for hypothesis testing.

In the classical approach, which computes a test statistic from the empirical data and then makes a comparison with the critical value. If the test statistic in the classical approach is larger than the critical value, then null hypothesis is rejected while in the p-value (or probability value) for a given statistical model, the probability that, when the null hypothesis is true, the statistical summary would be equal to, or more extreme than the actual observed result.

1. What is the importance of hypothesis testing in research?
2. Hypothesis testing is used to assess the plausibility of a hypothesis by using sample data.
3. The test provides evidence concerning the plausibility of the hypothesis, given the data.
4. Statistical analysts test a hypothesis by measuring and examining a random sample of the population being analyzed.