DATA ANALYTICS ASSIGNMENT QUESTIONS

DAY - 8:

1. Explain the concept of a Sampling Funnel in the context of the sampling process. Discuss the stages involved in a typical sampling funnel and highlight the importance of each stage.

2. Define Sampling Variation and discuss its implications for the reliability of sample-based inferences. Provide an example scenario where understanding and mitigating sampling variation is crucial.

3.Explain the Central Limit Theorem (CLT) and its significance in inferential statistics. Discuss how the CLT is used to construct Confidence Intervals and provide an example illustrating its application.

4.In the context of sampling, what is the purpose of the Central Limit Theorem (CLT)?

a) To define the target population

b) To reduce sampling bias

c) To ensure a representative sample

d) To provide a basis for making inferences about population parameters from sample statistics