Study following definitions/topics from book in details.

Chapter 8

Why we select a sample?

What is sampling error and what is central limit theorem?

Types of sampling

1. Simple random sampling
2. Systametic random sampling
3. Stratified random sampling
4. Cluster sampling

Question

A population consists of following fur values: 12, 12, 14, and 16

List all possible sample of size 2 without replacement and compute the mean of each sample.

Compute the **mean of the distribution of the sample mean** and the **population mean** and compare the two values

Chapter 1

Describe following four levels of measurement with their properties and examples

1. Nominal-level data
2. Ordinal level data
3. Ratio level data
4. Interval level data

Chapter 16: Time series and its components

Define following four components of time series with the help of examples and diagram

1. Secular trend
2. Cyclical variation
3. Seasonal variation
4. Irregular variation