

Competency 11.0 – Uses Statistical inference for making business decisions.

Competency Level 7.2 – Builds the sampling distribution of sample mean for statistical inference.

- Sample mean differs from sample to sample. Accordingly it can be considered as a random variable.
- The probability distribution of a sample statistics is known as a sampling distribution.
- The probability distributions of statistics, such as sample means, sample variance, sample standard deviation and sample propotion are considered as sampling distributions.
- The probability distribution of all the possible values taken by a particular characteristic in connection with the considered population related to the study is known as the population distribution.

Exercise

1. Marks of four students in an examination are given below.

35,40,50,75

1.)Find the mean of those marks.

2.)How many samples with size 2 can be drawn from this population?

3.) If sample elements are drawn on simple random sampling method, what are the elements that can be contained in each sample?

4.)What are the sample means that can be derives from each sample?