

Department of Computer Engineering

Practice Tutorial:

Module 3: Sampling Theory-I

1. Nine items of a sample had the following values - 45,47,50,52,48,47,49,53,51.
Does the mean of 9 items differ from the assumed population mean 47.5.?
2. A random sample of size 16 has mean 53. The sum of squares of the deviations taken from mean is 150. Can this sample be regarded as taken from population having 56 as mean? Obtain 95% confidence limits of the mean of population, if it is unknown.
3. Two types of anti- biotic were tested on two groups of patients for curing a particular disease and the following data were obtained.

	Type A	Type B
No. of Patients	7	6
Mean periods(In days)	14.55	10.10
Unbiased S.D. (in days)	3.2	2.5

Use 5% level of significance to test the null hypothesis that the difference in The mean period of the two drugs is significant.

4. To compare the prices of a certain product in 2 cities ten shops were selected at random in each town. The prices noted as given below:

City I	61	63	56	63	56	63	59	56	44	61
City II	55	54	47	59	51	61	57	54	64	58

Test whether the average prices can be said to be the same in the two cities at 5% LOS.

5. A random sample of 400 members is found to have a mean of 4.45 cms.
Can it be reasonably regarded as a sample from a large population whose mean is 5 cms and variance is 4 cms.