PART C

Statistical Inference

STATISTICAL INFERENCE

The third part of this lab course comprises Sessions 9 and 10, which will enable you to develop the practical skills for performing the parametric test using MS Excel 2007. In lab sessions of Part A, you have learnt how to classify and represent data diagrammatically and graphically. You have also learnt how to compute the measures of central tendency, measures of dispersion, skewness, kurtosis and various coefficients of correlation in Part B. As you know, the representation of data and computation of descriptive statistic is not enough to draw conclusion regarding data and various statistical tests are used to test the claim or hypotheses of respective data.

In Block 3 of MST-004 (Statistical Inference), you have studied one as well as two-sample parametric tests such as Z, t, chi-square and F-tests. You have also learnt which test should be applied in a given situation.

In **Session 9**, you will learn how to apply the one-sample Z-test for population mean and proportion, t-test for population mean and chi-square test for population variances using MS Excel 2007. Two-sample Z-test for difference of two population means and difference of two population proportions, t-test for difference of two population means, paired t-test and F-test for two population variances are explained in **Session 10** using MS Excel 2007.

All sessions of this part have been designed in such a way that after successfully completing them, you will be able to apply parametric tests using MS Excel 2007 for any given data.

You should study Block 3 of MST-004 entitled Statistical Inference thoroughly before performing activities of the lab sessions of Part C. In this part, we shall apply all concepts and formulae explained in that block.