ESTIMATION OF MISSING RESPONSES IN DESIGN OF EXPERIMENTS

by Dr. N.Ch. Bhatra Charyulu

Professor of Statistics
Department of Statistics, University College of Science,
Osmania University, Hyderabad-7.
dwarakbhat@osmania.ac.in

Abstract

Experimental designs are used to get maximum information with minimum expenditure in minimum possible time and evaluating outcomes critically by avoiding systematic errors and ignoring spurious effects. In some situations, even in well-planned experiments, responses (observations) on some experimental units may not be available. In these situations, the resulting data is incomplete to carry out the analysis as per the original plan of the experiment. Then we cannot proceed further without estimating the missing responses to carry out the analysis. In this talk we will explore and discuss various approaches used in estimating the missing responses in various experimental designs.

Keywords or Phrases: Basic designs, Response surfaces, Repeated Measurement Designs, Iterative and non-iterative approaches.