International Journal of Applied Mathematics & Statistical Sciences (IJAMSS)
ISSN(P): 2319-3972; ISSN(E): 2319-3980
Vol. 6, Issue 1, Dec - Jan 2017; 81-88

International Academy of Science, Engineering and Technology
Connecting Researchers; Nurturing Innovations

OBTAINING SUPER-EFFICIENT ESTIMATORS FOR A REAL-VALUED PARAMETER: DELTA METHOD

K. SIVASAKTHI[1], T. M. DURAIRAJAN[2] & MARTIN L. WILLIAM[3]

[1]Department of Statistics, Tagore College of Arts and Science, Chennai, India

[2,3]Department of Statistics, Loyola College, Chennai, India

ABSTRACT

This paper addresses the problem of finding super-efficient estimators for single parameter families. Initially, the original approach of Hodges (1951) is presented. A procedure for obtaining super-efficient estimators with respect to 'Fisher Information', using the 'Delta Method' of asymptotic inference theory is derived and illustrated with examples.

MATHEMATICS SUBJECT CLASSIFICATION: 62F10, 62F12

KEYWORDS: Fisher Information, Maximum Likelihood Estimators, Super-Efficiency