GENERALIZED HORN’S FUNCTIONS OF MATRIX ARGUMENTS

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ABSTRACT

Four results have been established here- three for the function $(k)_{3}^{(n)}$ and one for the function $(k)_{4}^{(n)}$ with matrix arguments along with two special cases.

INTRODUCTION

The generalized Horn’s functions $(k)_{3}^{(n)}$ and $(k)_{4}^{(n)}$ follow as the generalizations of the Horn’s functions $H_{3}$ and $H_{4}$ of two variables. We have already defined the functions $(k)_{3}^{(n)}$ and $(k)_{4}^{(n)}$ with matrix arguments in our previous papers [5,6]. Here, we have given further results for these functions. All the matrices appearing in this paper are (p x p) real symmetric positive definite matrices and the meanings of all the other symbols used are the same as in the works of Mathai [2, 3].

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