ABSTRACT

THE APPLICATION FOR CHARACTERIZATIONS OF ESTIMABILITY ON GENERAL LINEAR MODEL

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The application of linear model has been widely used in modeling to analize data. In the case of unbalanced or missing data, the model sometime become complicated. There are some approaches to deal with missing data, one of them is through the estimability criteria. The idea of estimability is that there exist unique best linear unbiased estimates (BLUE) of linear combinations of the parameters if the linear combinations are estimable. The purposes of the research were testing some general linear model with missing data and testing estimability of linear combinations of parameter. In the example for missing data, first we find the estimability parameter by using the row echelon form, then the hypothesis to be tested based on the estimability criteria was built.

Keywords : general linear model, characterizations of estimability, estimable function and row echelon form