

## ABSTRACT

### ***DETERMINE THE INITIAL BASIC FEASIBLE SOLUTION ON FIXED CHARGE TRANSPORTATION PROBLEM USING STAIRCASE METHOD***

By

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Fixed charge transportation problem is a transportation problem that involves fixed costs in distributing goods from sources to destinations to get the minimum total distribution cost. This paper discussed about the Staircase method to determine the initial basic feasible solution on fixed charge transportation problem by developing Balinski's Relaxed Transportation Problem/RTP which relaxed the fixed costs in the FCTP formulation with an initial model involving variables 0-1 becomes classic transportation problem. The Staircase method was applied to solve the fixed charge transportation problem in the UD. Anugrah. In the case study obtained an initial basic feasible solution with a total transportation cost that can save transportation costs by 30.6%.

**Keywords** : FCTP, Initial Basic Feasible Solution, Staircase Method.