BAB V
KESIMPULAN & SARAN

Pada bab ini dibahas mengenai kesimpulan dan saran dari hasil penelitian yang telah dilakukan. Kesimpulan yang diambil dibuat berdasarkan tujuan yang telah dicantumkan pada bab satu. Saran yang diusulkan merupakan saran untuk membantu penelitian yang akan dilakukan selanjutnya.

V.1 Kesimpulan

Berdasarkan hasil dari serangkaian kegiatan penelitian yang telah dilakukan, diperoleh beberapa kesimpulan yang dapat menjawab rumusan masalah pada bab satu. Berikut merupakan kesimpulan yang diperoleh.

1. Model CVRP (*Capacitated Vehicle Routing Problem*) dengan adanya prioritas pengiriman menggunakan model matematis dasar Toth & Vigo (2002) dengan menambahkan batasan persamaan tambahan yang telah dikembangkan oleh (Ravly, 2021), yaitu dengan menambahkan matriks prioritas dan persamaan $\sum_{i=0}^{n}\sum_{j=1}^{n} x_{ij}p_{ij} = np$.
2. Hasil pengujian dari penerapan model CVRP dengan adanya prioritas pengiriman pada kasus hipotetik berhasil dilakukan karena masing-masing kendaraan mengunjungi node prioritas terlebih dahulu dan tidak ada kendaraan yang mengangkut melebihi kapasitas kendaraan.
3. Penerapan algoritma metaheuristik SA (*Simulated Annealing*) sudah memberikan hasil yang mendekati optimal untuk kasus-kasus yang telah diberikan. Hal tersebut dapat dilihat dari hasil yang terbentuk yang diperhitungkan pada kasus hipotetik. Walaupun masih ada yang memberikan hasil selisih total jarak yang cukup jauh dari nilai optimalnya.

V.2 Saran

Dari hasil penelitian yang telah dilakukan, terdapat pula saran yang dapat membantu peneliti selanjutnya dalam melakukan penelitian. Sarannya yaitu dapat melakukan percobaan dengan menggunakan algoritma lainnya dan atau menggabungkan beberapa metode untuk mendapatkan hasil yang lebih baik.

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