Thesis Title	Heuristic Algorithm for Maintenance Breakdown System Planning
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Abstract

The purpose of this research was to present the heuristic algorithms of solving the laboratory equipment and autonomic machines maintenance planning and scheduling of Government Pharmaceutical Organization. There are 3 proposed heuristic algorithms: 1) Sequencing jobs by considering the most importance value, the longest processing time job and assigning workers by considering the fastest worker 2) sequencing jobs same as the first algorithm and assigning workers by considering the lowest importance value worker and 3) Sequencing jobs by considering the most importance value, the shortest processing time job and assigning workers by considering the lowest importance value worker. The findings indicated that jobs scheduling and assigning by the 3 heuristic algorithms can reduce the delay score from now to78.78%, 87.17% and 89.72% respectively.

Keywords: Job assigning / Job sequencing / Heuristic Algorithm / Maintenance planning