

CHAPTER VI

CONCLUSIONS

This chapter contains several conclusions and suggestions obtained based on the results of the research conducted.

6.1 Conclusions

Based on the findings of this study, it was concluded that the spare parts inventory for the Woodyard Department of PT XYZ should be managed based on the ABC and FNS classification system, dividing the spare parts into three categories: 91 parts in Category I (AF, BF, AN, BN), 73 parts in Category II (CF, CN), and 24 parts in Category III (AS, BS, CS). The inventory planning policies proposed include the periodic review method (R, s, S) for Category I, the periodic review (R, S) method for Category II, and the average expenditure method for Category III. The order timing will align with the review intervals, ranging from 15 to 50 days for Category I and 22 days to over two months for Category II, while the order quantity is based on the difference between the maximum stock and existing stock at the review time, particularly when the stock reaches or falls below the reorder point (ROP). Consequently, the total inventory cost, including ordering, holding, and shortage costs, is estimated at \$10,687.99.

6.2 Suggestions

There are several suggestions to improve similar research in the future, as follows:

1. Future research should conduct inventory planning for other spare parts in different departments.
2. Future research can develop Standard Operating Procedures (SOPs) for employees to implement the proposed inventory planning.