

LIST OF CONTENT

ABSTRACT	v
LIST OF CONTENT	vi
LIST OF FIGURES	ix
LIST OF TABLE	x
LIST OF APPENDIX	xii
LIST OF SYMBOLS	xiii
LIST OF TERMS	xv
CHAPTER I PLERIMINARY	1
I.1 Background	1
I.2 Problem Formulation	5
I.3 Purpose	5
I.4 Limitation	5
I.5 Benefits	5
I.6 Writing Systematic	5
CHAPTER II THEORITICAL BASELINE	7
II.1 Inventory Definition	7
II.2 Inventory Function	7
II.3 Inventory Type	7
II.4 Inventory Cost	8
II.5 ABC Analysis	9
II.6 XYZ Analysis	10
II.7 Integration of ABC-XYZ Analysis	11
II.8 Inventory Policy	12
II.9 Probabilistic Inventory Policy	12
II.9.1 Q Model	13
II.9.2 P Model	14
II.10 Periodic Review Inventory Policy	14
II.10.1 Model Formulation	15
II.11 Sensitivity Analysis	18
II.12 Method Selection Reason	18
II.12.1 Classification Method	18

II.12.2	Inventory Policy Method.....	19
II.13	Previous Research.....	20
CHAPTER III RESEARCH METHODOLOGY		22
III.1	Conceptual Model.....	22
III.2	Problem Solving Systematic.....	22
III.2.1	Identification and Preliminary Phase.....	23
III.2.2	Data Collecting Phase.....	24
III.2.3	Data Processing	25
III.2.3	Analysis and Conclusion phase	25
CHAPTER IV DATA COLLECTION AND PROCESSING.....		26
IV.1	Company Profile.....	26
IV.2	Data Collection	26
IV.2.1	Demand Data	27
IV.2.2	Unit Price Data	28
IV.2.3	Lead Time Data	28
IV.2.4	Order Cost Data.....	29
IV.2.5	Holding Cost Data	29
IV.2.6	Shortage Cost Data	32
IV.2.3	Actual Inventory Cost Calculation	33
IV.3	Data Processing	36
IV.3.1	Distribution Test.....	36
IV.3.2	Spare Parts Classification.....	38
IV.3.3	Review Interval Calculation.....	49
IV.3.4	Periodic Review (R,s,S) Calculation	56
IV.3.5	Periodic Review (R,S) Calculation.....	59
IV.3.5	Proposed Total Inventory Cost Calculation	60
CHAPTER V ANALYSIS.....		63
V.1	Periodic Review (R,s,S) and Periodic Review (R,S) Analysis.....	63
V.2	Category 1 Cost Comparison Analysis.....	64
V.2.1	Order Cost Comparison	64
V.2.2	Holding Cost Comparison	65
V.2.3	Shortage Cost Comparison	65
V.2.4	Total Inventory Cost Comparison	66
V.3	Category 2 Cost Comparison.....	67

V.3.1	Order Cost Comparison	67
V.3.2	Holding Cost Comparison	68
V.3.3	Shortage Cost Comparison	68
V.3.4	Total Inventory Cost Comparison	69
V.4	Overall Total Inventory Cost Comparison	70
V.5	Service Level Comparison Analysis	70
V.4	Sensitivity Analysis	71
V.4.1	Sensitivity To Order Cost	71
V.4.2	Sensitivity To Holding Cost	72
V.4.3	Sensitivity To Shortage Cost	73
V.4.4	Sensitivity To Demand	73
V.4.5	Overall Sensitivity	74
CHAPTER VI CONCLUSION AND RECOMMENDATION		76
V1.1	Conclusion	76
V1.2	Recommendation	76
REFERENCES		77