CONTENTS

Chapter	goiteathreach	Page
1	Introduction to logistics	7
1.1	History	7
1.2	Logistic system	10
1.3	Logistic chain and its structure	11
1.4	Logistic places of contact	16
2	Forecasting	20
2.1	Importance of forecasting	20
2.2	Time series analysis	21
3	MRP – Material Requirements Planning	30
3.1	The planning process	30
3.2	Material requirements planning	31
4	Purchasing	38
4.1	The purchasing process	38
4.2	Just-in-time system (JIT)	42
5	Logistic services	46
5.1	Introduction	46
5.2	The level of services	47
6	Distribution chain	54
6.1	Characteristics of distribution chain	54
6.2	Examples of different distribution chains	56
6.3	Measuring delivery process performance	59
7	Inventory	60
7.1	Classification	60
7.2	Functions of inventory	62
7.3	The basic inventory model	63
8	Inventory costs	66
8.1	Holding (carrying) costs	66
8.2	Ordering costs	67
8.3	Shortage costs	67
8.4	Calculation of economic order quantity	68
8.5	Price discounts	70
8.6	One shot inventory order of independent demand	72
8.7	Optimizing the orders in periods with different demand	74
9	Management of inventory: inventory control	76
9.1	Basic systems of inventory control	76
9.2	Order systems	78
10	Safety stock and ABC method	86
10.1	Safety stock	86
10.2	Method ABC	91
10.3	Management of A,B,C groups	94

11	Logistic elements	96
11.1	Passive elements	96
11.2	Automatic identification	99
11.3	Active elements	101
12	Warehousing	104
12.1	General characteristics	104
12.2	Warehousing categories	106
12.3	Location of warehouses and product storing	110
12.4	Classification of warehousing space and productivity measurement	111
12.5	Ways of material storing	112
12.6	Picking and shipping	116
13	Transport	118
13.1	Basic problems of transport	118
13.2	The state transport policy	121
13.3	Freight transport classification	124
13.4	Rail transport	126
13.5	Waterway transport	130
13.6	Air transport	130
13.7	Road transport	132
13.8	Combined transport	148
14	Packages in the material flow	151
-14.1	Introduction	151
14.2	Ways of packaging	152
14.3	Functions of packing	153
14.4	Packing materials	156
14.5	Recycling of packages	158
15	Process of supply chain analysis and synthesis	160
15.1	Process of analysis	161
15.2	Process of synthesis	163
16	Supply chain of flower auction in Aalsmeer, the Netherland	168
10 10 80 01	Appendix 1	171
	Appendix 2	172
	References	173
	Index	175