List of Tables

Table 2.1: Mechanisms corresponding to different Stages (S) vs. Flows (F) in a supply chain .................. 53
Table 2.2: Classification of Mechanisms with Examples ......................................................................... 57
Table 3.1: Munson and Rosenblatt’s (2001) data set used for this study .................................................. 93
Table 3.2: Supply chain performance for the three cases of delay in payments along with price
discounts (D = 1000, k_r = 15%, k_m = 15%, k_s = 15%) ................................................................. 94
Table 3.3: Profit comparison when using price discounts alone and along with ‘delay in payments’
Vs ‘No coordination’ (D = 1000, λ_m = 3, λ_s = 1, k_r = 15%,
k_m = 15%, k_s = 15%) .................................................................................................................. 95
Table 3.4: Analysis of supply chain profit (case 3 - maximum profit case) for the different market
conditions/ values of Return on investment (ROI) of various players (D = 1000, λ_m = 3, λ_s = 1, A_r = 30, A_m = 200, A_s = 400) ................................................................. 97
Table 3.5: Performance of the players and supply chain profit for different order/set up cost ................. 99
Table 3.6: Analysis of supply chain profit under no coordination with price discounts in conjunction with delay in payments for various cases of elasticity ......................................................... 100
Table 4.1: Input data for lost sale situation (product – health drink) ........................................................ 121
Table 4.2: Input data for Back order situation (product – bike) ............................................................ 122
Table 4.3: Supply Chain Performance (SC profit) under Coordination and No coordination ................. 123
Table 4.4: Supply Chain profit for various price discounts under lost sale and backorder .................. 126
Table 4.5: Supply Chain profit for various rate of return under lost sale and backorder ..................... 127
Table 4.6: Supply Chain profit for different cases of price elasticity under lost sale and backorder ........ 128
Table 4.7: Supply Chain profit for various cases of order cost under lost sale .................................... 129
Table 4.8: Supply Chain profit for various cases of order cost under back order ................................. 130
Table 4.9: Supply Chain profit for various cases of Delay in payment under lost sale and
backorder ........................................................................................................................................ 131
Table 4.10: Increase in profit with respect to one case to other case of coordination and no
coordination ..................................................................................................................................... 132
Table 5.1: Data used for the product under ‘lost sales situation’ — Fabric stiffener (assumes that
demand follows normal distribution) .............................................................................................. 145
Table 5.2: Data used for the product under ‘backorder situation’ — Car (assumes that demand
follows normal distribution) .......................................................................................................... 146
Table 5.3: Total cost vs. different cases of information sharing under lost sales situation .................... 149
Table 5.4: Total cost vs. different cases of information sharing under backorder situation

Table 5.5: Ranking of Information sharing (IS) cases for different performance measures under lost sale situation

Table 5.6: Ranking of Information sharing (IS) cases under different performance measures under backorder situation

Table 5.7: Statistical significance for the difference existing between the overall performance (total cost) corresponding to a pair of different information sharing (IS) under ‘lost sale’

Table 5.8: Statistical significance for the difference existing between the overall performances (total cost) corresponding to a pair of different information sharing (IS) under ‘backorder’