Resource planning

Business, Strategy



Resource Planning Name: Course: Lecturer: Institution: Date: Resource Planning Question One Aggregate requirement = (total requirements opening inventory + closing inventory) / Number of periods. Total requirement = 5000 + 10000 + 8000 + 2000 = 25000 Opening inventory = 1000 Closing inventory = 0 Number of periods = 4 Therefore, aggregate requirement = (25000 - 1000) / 4 = 6000 units Period1234TotalDemand/period500100008000200025000Production/period5 00100008000200025000Workers needed51008020 Workers hired09500 Workers fired5502060 Costs Period1234TotalWorkers hired0\$1900000\$19000Workers fired\$220000\$8000\$24000\$54000Regular salary\$6000\$120000\$96000\$24000\$246000Total\$28000\$139000\$104000\$ 48000\$319000The total aggregate units required in each guarter are 6000 units. The overall units required at the end of the fourth period are 25000. The overall cost to produce 25000 units at the end of the fourth period is \$319000. (c) According the answer above, the best strategy to use is the chase strategy. This is because the period is short. Secondly, there is no ending inventory.

This means that only what is needed is produced. The set labour and demand is for the satisfaction of the periods demand only. Therefore, the best strategy to employ in above is chase strategy. Question Two (a) Work12345678Customers Orders5030401025702530MPS100 100 100 100ATP603090805585`65135Orders that are not exceeding 135 units will be accepted because this is what the company has promised and able to deliver to the customers. However, for those orders that exceed 135 units, it would not possible for the customers since there are no more units. In this case, an

MPS should be introduced to cater for the excess orders of more than 180 units. Week1234Forecast150180210180Customers Orders140220200210Project available balance 1804070120160MPS250250250 Question Three (a) ItemScheduled ReceiptsProjected AvailableLead timeLot sizeY80 - week 3301 weekLFLB 502 weeks100C210 - week 2701 week210D 202 weeks60(b) ItemScheduled ReceiptsProjected AvailableLead TimeLot SizeZ0452 weeksLFLB0201 weekLFLC20 - week 4101 weekLFLD100 - week 31501 weekLFLE500 - week 22001 weekLFL Question Four Boston Distribution Center123456Gross Requirements02005500Scheduled receipts35035000Projected on-hand delivery 10452560555Planned order releases20055000 Denver distribution Center123456Gross Requirements020100020Scheduled receipts1111011110Projected on-hand delivery 15156718299Planned order releases 2010 00 200 Houston Distribution Center 1234 56 Gross Requirements10004500Scheduled receipts0060000Projected on-hand delivery 20101070252525Planned order releases0045000 Las Vegas Central Warehouse123456Gross Requirements46119511110Scheduled receipts208020000Projected on-hand delivery 5024918777Planned order

releases1195111100