Short-term financial planning

Business

Case study: Short-term Financial Planning From page 81- 84, Wayne L.

Winston, Operations Research, third edition Semicond is a small electronics company that manufactures tape recorders and radios. The per-unit labor costs, raw material costs, and selling price of each product are given in the table below. On December 1, 1998, Semicond has available raw material that is sufficient to manufacture 100 tape recorders and 100 radios. On the same date, the company's balance sheet as shown in table below, and Semicond's asset /liability ratio (called the current ratio) is 20000/10000 = 2. Semicond must determine how many tape recorder and radios should be produced during December. Demand is large enough to ensure that all goods produced will be sold.

All sales are on credit, however, and payment for goods produced in December will not be received until February 1, 1999. During December, Semicond will collect $2000 in accounts receivable, and Semicond must pay off $1000 of the outstanding loan and a monthly rent of $1000. On January 1, 1999, Semicond will receive a shipment of raw material worth $2000, which will be paid for on Febuary 1, 1999. Semicond's management has dicided that can cash balance on January 1, 1999 must be at least $4000. Also, Semicond's bank requires that the current ratio at the beginning of January be at least 2. To maximize the contribution to profit from December production, (revenues to be received) – (variable production costs), what should semicond produce during December? Cost Information for Semicond| | Tape Recorder| Radio| Selling price| $100| $90| Labor cost| $50| $35| Raw material cost| $30| $40| Balance Sheet for Semicond| | Assets| Liabilities|

Cash| $10, 000| | Accounts receivable| $3, 000| | Inventory outstanding| $7, 000| | Bank loan| | $10, 000|