

AC202 Management Accounting (Exercise # 9)

Q. 1 In 20x1, McGrath & Sons, a small environmental-testing firm, performed 11,000 radon tests for \$250 each and 15,200 lead tests for \$200 each. Because newer homes are being built with lead-free pipes, lead-testing volume is expected to decrease by 10% next year. However, awareness of radon-related health hazards is expected to result in a 5% increase in radon-test volume each year in the near future. Jim McGrath feels that if he lowers his price for lead testing to \$190 per test, he will have to face only a 5% decline in lead-test sales in 20x2.

1. Prepare a 20x2 sales budget for McGrath & Sons assuming that they hold prices at 20x1 levels.
2. Prepare a 20x2 sales budget for McGrath & Sons assuming that they lower the price of a lead test to \$190. Should McGrath lower the price of a lead test in 20x2 if its goal is to maximize sales revenue?

Q. 2 The Mendez Company expects sales in 20x1 of 100,000 units of serving trays. Mendez's beginning inventory for 20x1 is 7,000 trays; target ending inventory, 11,000 trays. Compute the number of trays budgeted for production in 20x1.

Q. 3 Inglenook Co. produces wine. The company expects to produce 1,500,000 liter bottles of Chablis in 20x1. Inglenook purchases empty glass bottles from an outside vendor. Its target ending inventory of such bottles is 50,000; its beginning inventory is 20,000. For simplicity, ignore breakage. Compute the number of bottles to be purchased in 20x1.

Q. 4 The Mahoney Company has prepared a sales budget of 42,000 finished units for a three-month period. The company has an inventory of 22,000 units of finished goods on hand at December 31 and has a target finished goods inventory of 24,000 units at the end of the succeeding quarter.

It takes three gallons of direct materials to make one unit of finished product. The company has an inventory of 90,000 gallons of direct materials at December 31 and has a target ending inventory of 110,000 gallons at the end of the succeeding quarter. How many gallons of direct materials should be purchased during the three months ending March 31?

Q. 5 The following budget estimates have been prepared by Flowers Company:

	<u>Cash Receipts</u>	<u>Cash Payments</u>
January	\$220,000	\$220,000
February	380,000	400,000
March	320,000	319,800

The company likes to maintain a minimum cash balance of \$50,000.

Any excess cash is invested in a money market account earning 8 percent compounded monthly. Interest is reinvested in the money market account. Any cash deficiencies are covered by a withdrawal from the money market account. If additional cash is needed, the company has a line of credit at 12 percent interest with the local bank. Borrowings occur at the end of a month and interest is paid at the end of each month.

Assume a cash balance on January 1 of \$50,000, a money market account balance of \$0, and a credit line loan balance of \$0.

Required: Prepare a cash budget for each of the first three months of the year.

Q. 6 Budgeted sales for the third quarter of the year for Brown Company are as follows:

	<u>Budgeted Sales</u>
July	\$300,000
August	375,000
September	450,000

June sales was \$350,000. The company normally collects 30 percent in the month of sale and 65 percent in the month following the sale. Five percent of all sales are uncollectible and are written off in the following month.

Required: Prepare a schedule of cash collections on accounts receivable for the third quarter.

Q.7 The Scarborough Corporation manufactures and sells two products: T1 and T2. In July 20x1, Scarborough's budget department gathered the following data to prepare budgets for 20x2:

20x2 Projected Sales	<u>Product</u>	<u>Units</u>	<u>Price</u>
	T1	60,000	\$165
	T2	40,000	\$250

20x2 Inventories in units	<u>Expected Target</u>		
<u>Product</u>	<u>Jan 1, 20x2</u>	<u>Dec 31, 20x2</u>	
T1	20,000	25,000	
T2	8,000	9,000	

The following direct materials are used in the two products:

Direct Material	<u>Unit</u>	<u>Amount used per unit</u>	
		<u>T1</u>	<u>T2</u>
A	Pound	4	5
B	Pound	2	3
C	piece	0	1

Projected data for 20x2 with respect to direct materials are as follows:

Direct Material	<u>Anticipated Price</u>	<u>Expected DM: Jan 1, 20x2</u>	<u>Target DM: Dec 31, 20x2</u>
A	\$12	32,000 lb.	36,000 lb.
B	\$5	29,000 lb.	32,000 lb.
C	\$3	6,000 units	7,000 units

Projected direct manufacturing labor requirements and rates for 20x2 are as follows:

Product	<u>Hours per unit</u>	<u>Rate per hour</u>
T1	2	\$12
T2	3	\$16

Manufacturing overhead is allocated at the rate of \$20 per direct manufacturing labor hour.

Required: Prepare (1) Revenues budget (in \$), (2) Production budget (in units), (3) Direct material purchases budget (in quantities and in \$), (4) Direct manufacturing labor budget (in \$), and (5) Budgeted finished goods inventory at December 31, 20x2 (in \$).