

QUESTIONS - BUDGETING

QUESTION 1. Max Technology Company is an aircraft producing company. The Company produces and sells two types of product: Complex parts and simple parts. Management is ready to prepare a master budget for the year 2005. The executives forecast the following figures:

Product	Expected Target Inventory in Units		Budgeted units to be sold	Unit Price
	1 January 2005	31 December 2005		
Complex part	1,000 units	1,500 units	70,000 units	\$200
Simple part	7,000 units	3,000 units	120,000 units	\$ 80

Direct material	Expected Target Inventory in Unit		Cost per kg
	1 January 2005	31 December 2005	
Material TK	30,000 kg.	20,000 kg.	\$ 7

Content of each finished good	Direct material TK	Direct labor
Complex part	5 kg	10 hours
Simple part	2 kg	2 hours

Direct labor cost is \$ 20 per hour

Variable manufacturing overhead is allocated at the rate of \$15 per direct labor hour.

Fixed manufacturing overhead is forecast to be \$9,000,000 for 2005.

First in First out method (FIFO) is used for inventory costing.

Required:

- a. Prepare the revenue budget.
- b. Prepare the production budget.
- c. Prepare the direct materials purchase budget.

QUESTION 2. FC Company has the following sales budget for the last six months of 2004:

July	\$75,000	October	\$60,000
August	80,000	November	100,000
September	90,000	December	70,000

Historically, the cash collection of sales has been as follows:

- 70 percent of sales collected in month of sale,
- 22 percent of sales collected in month following sale,
- 7 percent of sales collected in second month following sale, and
- 1 percent of sales is uncollectible.

Required:

Compute the total cash collections for October.

QUESTION 3. Billiard, Inc. manufactures pool cues. It expects to sell 20,000 cues in 2005. The company had enough beginning inventory of direct materials to produce 24,000 cues. Beginning inventory of finished cues totaled 2,000 with a targeted ending inventory of 2,500 cues. The cues sell for \$12.00 and the company keeps no work-in-process inventory. Direct materials costs for each cue total \$2.00, while direct labor is \$4.00. Factory overhead is \$0.80 per cue.

What will be the amount of cost of goods sold?

QUESTION 4. Jermaine Corporation has budgeted sales of 18,000 units, target ending finished good inventory of 3,000 units, and a beginning finished goods inventory of 900 units.

How many units should be produced?

QUESTION 5. Watson Manufacturing manufactures and sells a model of snowboard called Swift. Following data was gathered to prepare the budget for 2005:

Material requirement:

Wood	5 m ² per snowboard at \$30 per m ²
Fiberglass	3 m per snowboard at \$5 per m
Direct manufacturing labor	5 hours per snowboard at \$25 per hour

Watson's management expects to sell 2,100 snowboards during 2005 at an estimated selling price of \$500 per snowboard.

Variable manufacturing overhead is allocated at the rate of \$7 per direct labor hour. There are also \$70,000 fixed manufacturing overhead costs budgeted for 2005. Watson combines both fixed and variable manufacturing overhead into a single rate based on direct labor hours. Budgeted marketing and other non-manufacturing costs are \$50,000 for 2005.

<u>Inventory estimations:</u>	<u>1/1/2005</u>	<u>31/12/2005</u>
Direct material- wood	1,000 m ²	2,000 m ²
Direct material- fiberglass	2,000 m	1,000 m
Swift snowboards	200 units	100 units

Assume that Watson uses FIFO inventory method. There was no ending or beginning WIP inventory. Prepare ending inventory budget for both direct materials and finished goods.

QUESTION 6. Grinnell Manufacturing Company has the following information: (All cash expenses are paid as incurred.)

<u>Month</u>	<u>Budgeted Sales</u>
January	\$76,000
February	85,000
March	92,000
April	79,000

<u>Budgeted Expenses per Month</u>	
Wages	\$15,000
Advertising	12,000
Depreciation	3,000
Other	4 percent of sales

What is the expected total cash disbursements for expenses in February?

QUESTION 7. Alta Company has gathered the following information:

June 30, cash balance,	\$45,000
Dividends paid in July,	\$12,000
Cash expenditures in July for operating expenses,	\$36,800
Depreciation expense in July,	\$4,500
Cash collections in July,	\$89,000
Merchandise purchases paid in cash in July,	\$56,200
Purchased equipment for cash in July,	\$17,500

Alta desires to keep a minimum cash balance of \$10,000.

Prepare a cash budget for July, and indicate whether or not Alta meets minimum cash requirements.

QUESTION 8. Willie Company has the following data:

<u>Month</u>	<u>Budgeted Sales</u>
January	\$120,000
February	108,000
March	132,000
April	144,000

The gross profit rate is 40 percent, and the inventory at the end of December was \$21,600. Desired inventory levels are 30 percent of next month's sales at cost.

What is the expected total purchases budgeted for March?

QUESTION 9. The following information pertains to Tiffany Company:

<u>Month</u>	<u>Sales</u>	<u>Purchases</u>
January	€ 30,000	€ 16,000
February	€ 40,000	€ 20,000
March	€ 50,000	€ 28,000

- Cash is collected from customers in the following manner:

Month of sale	30%
Month following the sale	70%
- 40% of purchases are paid for in cash in the month of purchase, and the balance is paid the following month.
- Labor costs are 20% of sales. Other operating costs are €15,000 per month (including €4,000 of depreciation). Both of these are paid in the month incurred.
- The cash balance on March 1 is € 4,000. A minimum cash balance of € 3,000 is required at the end of the month. Money can be borrowed in multiples of €1,000.

- a. How much cash will be collected from customers in March?
- b. How much cash will be paid to suppliers in March?
- c. How much cash will be disbursed in total in March?
- d. What is the ending cash balance for March?

QUESTION 10. Asel Technology Company is an aircraft producing company. The Company produces and sells one type of product: Regular parts. Management ready to prepare a master budget for the year 2004. The executives forecast the following figures:

<u>Direct material :</u>	<u>Beginning inventory</u>	<u>Target ending inventory</u>	<u>Costs</u>
Material no.5	500 kg.	1000 kg.	\$ 10 per kg.
Material no.6	1000 kg.	700 kg.	\$ 15 per kg.

Direct labor cost is \$ 30 per hour

Variable manufacturing overhead is allocated at the rate of \$10 per direct labor hour.

Fixed manufacturing overhead is forecast to be \$11,400,000 for 2004.

Target ending (31 December 2004) inventory of regular parts: 3,000 units.

Beginning (1 January 2004) inventory of regular parts: 8,000 units

Budgeted units to be sold: 100,000 units at \$150 per unit.

The inventoriable cost per regular part in 2003 is \$400.

Inventory is costed using using First in First out method (FIFO).

Content of each finished good of regular part:

Direct material no.5 5 kg. at \$10 per kg.

Direct material no.6 10 kg. at \$15 per kg.

Direct labor 3 hours

Required:

1. Prepare the production budget.
2. Prepare the direct materials usage budget.
3. Prepare the ending inventory budget.

QUESTION 11. Late Company reports the first quarter of 2008 as follows:

Sales (7,000 units)	€ 56,000
Cost of goods sold	<u>21,000</u>
Gross margin	35,000
Administration costs	7,000
Marketing and Distribution costs	<u>11,000</u>
Operating income	<u>€ 17,000</u>

The Company is developing the budget for the second quarter of 2008.

- Second Quarter the company would like to increase selling prices by 5%, and as a result expects a decrease in sales volume of 10%.
- Assume that all of the COGS is a variable cost.
- All of the administration expenses are fixed costs and are expected to remain constant.
- € 4,000 of the marketing costs was fixed. Unit variable marketing cost will remain the same.

Prepare a budgeted income statement for the second quarter of 2008.

QUESTION 12. Sporting Company manufactures pool cues. It expects to sell 20,000 cues in 2003. The company had enough beginning inventory of direct materials to produce 24,000 cues. Beginning inventory of finished cues totaled 2,000 with a targeted ending inventory of 2,500 cues. The cues sell for \$12.00 and the company keeps no work-in-process inventory. Direct materials costs for each cue total \$2.00, while direct labor is \$4.00. Manufacturing overhead is \$0.80 per cue.

Required:

- How many cues will be produced in 2003?
- What will be the amount of cost of goods sold?
- What will be the total costs incurred for direct materials, direct manufacturing labor, and manufacturing overhead, respectively, for 2003?
- How much is the gross profit for 2003?

QUESTION 13. The Patton Company prepared the following sales budget:

<u>Month</u>	<u>Budgeted Sales</u>
March	\$150,000
April	159,000
May	153,000
June	163,500
July	157,500

In addition, the gross profit rate is 40 percent and the desired inventory level is 30 percent of next month's cost of goods sold.

Required

Prepare a purchases budget for April through June.

QUESTION 14. Alta Company has gathered the following information:

June 30, cash balance,	\$45,000
Dividends paid in July,	\$12,000
Cash expenditures in July for operating expenses,	\$36,800
Depreciation expense in July,	\$4,500
Cash collections in July,	\$89,000
Merchandise purchases paid in cash in July,	\$56,200
Purchased equipment for cash in July,	\$17,500

Alta desires to keep a minimum cash balance of \$10,000.

Required:

Prepare a cash budget for July, and indicate whether or not Alta meets minimum cash requirements.

QUESTION 15. Osborne Enterprises is developing its budgets for 2006. The 2005 income statement is as follows:

Sales (84,000 units)	\$504,000
Less: cost of goods sold	<u>336,000</u>
Gross margin	\$168,000
Operating expenses (includes \$33,600 of depreciation)	<u>134,400</u>
Net income	\$33,600

Selling prices for 2006 are expected to increase by 8 percent, and sales volume in units will decrease by 10 percent. The cost of goods sold will decline by 10 percent per unit. Other than depreciation, all other operating costs are expected to decline by 5 percent.

- What is the budgeted gross margin for 2006?
- What is the budgeted net income for 2006?

QUESTION 16.

Noel Enterprises has budgeted sales in units for the next five months as follows:

January	.....	6,800 units
February	....	5,400 units
March	.....	7,200 units
April	.....	4,600 units
May	.....	3,800 units

Past experience has shown that the ending inventory for each month must be equal to 10% of the next month's sales in units. The inventory on December 31 contained 400 units. The company needs to prepare a production budget for the second quarter of the year.

- How much is the beginning inventory in units for April?
- How much is the total number of units to be produced in February?
- How much is the desired ending inventory for March?

QUESTION 17. The following information pertains to Eagle Company:

Month	Sales	Purchases
January	€ 60,000	€ 32,000
February	€ 80,000	€ 40,000
March	€ 100,000	€ 56,000

- Cash is collected from customers in the following manner:

Month of sale	40%
Month following the sale	60%
 - 30% of purchases are paid in cash in the month of purchase, and the remaining balance is paid in the following month.
 - Labor costs are 25% of sales. Other operating costs are €30,000 per month (including €8,000 of depreciation). Both of these are paid in the month incurred.
 - The cash balance on March 1 is € 8,000. A minimum cash balance of € 5,000 is required at the end of the month. Money can be borrowed in multiples of €1,000.
- How much cash will be collected from customers in March?
 - How much cash will be paid to suppliers in March?
 - How much cash will be disbursed in total in March?
 - What is the ending cash balance for March?