ESERCIZI

1 PREPARING A BUDGETED INCOME STATEMENT

Lester Company provided the following information for the coming year:

Units produced and sold
60,000 Cost of goods sold per unit
$18 Selling price
$27 Variable selling and administrative expense per unit
$2.70 Fixed selling and administrative expense
$243,000 Tax rate
35%

Required:

Prepare a budgeted income statement for Lester Company for the coming year. (Round all income statement amounts to the nearest dollar.)

2 PREPARING AN ACCOUNTS RECEIVABLE AGING SCHEDULE

Don Gaspar and Company is a legal services firm. All sales of legal services are billed to the client (there are no cash sales). Don Gaspar expects that, on average, 50 percent will be paid in the month of billing, 30 percent will be paid in the month following billing, and 15 percent will be paid in the second month following billing. For the next five months, the following sales billings are expected:

May
$60,000 June
72,000 July
55,000 August
62,000 September
65.000

Required:

Prepare a schedule showing the cash expected in payments on accounts receivable in August and in September.

3 PREPARING AN ACCOUNTS PAYABLE SCHEDULE

Shetland, Inc. purchases raw materials on account for use in production. The direct materials purchases budget shows the following expected purchases on account:

April	$468,000
May	514,000
June	520,000

Shetland typically pays 30 percent on account in the month of billing and 70 percent the next month.

Required:

1. How much cash is required for payments on account in May?
2. How much cash is expected for payments on account in June?

4 PREPARING A CASH BUDGET

TNT Pizzeria provided the following information for the month of October:

a. Sales are budgeted to be $120,000. About 15 percent of sales are cash; the remainder are on account.
b. TNT expects that, on average, 70 percent of credit sales will be paid in the month of sale, and 26 percent will be paid in the following month,
c. Food purchases, all on account, are expected to be $83,000. TNT pays 25 percent in the month of purchase and 75 percent in the month following purchase.
d. Most of the work is done by the owners, who typically withdraw $6,000 a month from the business as their salary. (The $6,000 is a payment in total to the two owners, not per person.) Various part-time workers cost $4,400 per month. They are paid for their work weekly, so on average 90 percent of their wages are paid in the month incurred and the remaining 10 percent in the next month.
e. Utilities average $5,200 per month. Rent on the building is $3,600 per month.
f. Insurance is paid quarterly; the next payment of $900 is due in October.
g. September sales were $130,000 and purchases of food in September equaled $98,000.
h. The cash balance on October 1 is $7,680.

Required:

1. Calculate the cash receipts expected in October. (Hint: Remember to include both cash sales and payments from credit sales.)
2. Calculate the cash needed in October to pay for food purchases.
3. Prepare a cash budget for the month of October.

5 PRODUCTION BUDGET AND DIRECT MATERIALS PURCHASES BUDGETS

Seafood Inc. produces shrimp in cans. The sales budget for the first four months of the year is as follows:

	Unit Sales	Dollar Sales ($)
January	200,000	150,000
February	240,000	180,000
March	220,000	165,000
April	200,000	150,000

Company policy requires that ending inventories for each month be 35 percent of next month’s sales. At the beginning of January, the inventory of shrimp is 36,000 cans.

Each can of shrimp needs two raw materials: four ounces of shrimp and one can. Company policy requires that ending inventories of raw materials for each month be 20 percent of the next month’s production needs. That policy was met on January 1.

Required:

1. Prepare a production budget for the first quarter of the year. Show the number of cans that should be produced each month as well as for the quarter in total.
2. Prepare separate direct materials purchases budgets for cans and for shrimp for the months of January and February.

6 PRODUCTION BUDGET

Jimison Inc. produces spiral-bound notebooks. The unit sales for the first four months of the year for this product is as follows:

Unit Sales

January	150,000
February	200,000
March	220,000
April	200,000

Company policy requires that ending inventories for each month be 15 percent of next month's sales. However, at the beginning of January, due to greater sales in December than anticipated, the beginning inventory of notebooks is only 12,000.

Required:

Prepare a production budget for the first quarter of the year. Show the number of units that should be produced each month as well as for the quarter in total.

7 DIRECT MATERIALS PURCHASES BUDGET

Lester Company produces a variety of labels, including iron-on name labels, which are sold to parents of camp-bound children. (The camps require campers to have their name on each article of clothing.) The labels are sold in a roll of 1,000, which requires about 25 yards of paper strip. Each yard of paper strip costs $0.17. Lester has budgeted production of the label rolls for the next four months as follows:

Units

March	5,000
April	25,000
May	35,000
June	6,000

Inventory policy requires that sufficient paper strip be in ending monthly inventory to satisfy 20 percent of the following month's production needs. The inventory of paper strip at the beginning of March equals exactly the amount needed to satisfy the inventory policy.

Required:

Prepare a direct materials purchases budget for March, April, and May, showing purchases in units and in dollars for each month and in total.

8 SALES BUDGET

Norton Inc. manufactures six models of leaf blowers and weed eaters. Norton's budgeting team is finalizing the sales budget for the coming year. Sales in units and dollars for last year follow:

Product	Number Sold	Price ($)	Revenue
LB-1	16,800	29	$ 487,200
LB-2	18,000	15	270,000
WE-6	25,200	13	327,600
WE-7	16,200	10	162,000
WE-8	2,400	22	52,800

WE-9	1,000	26	26,000
Total			$1,325,600

In looking over the previous year's sales figures, Norton's sales budgeting team recalled the following:

a. Model LB-1 is a newer version of the leaf blower with a gasoline engine. The LB-1 is mounted on wheels instead of being carried. This model is designed for the com mercial market and did better than expected in its first year. As a result, the number of units of Model LB-1 to be sold was forecast at 300 percent of the previous year's units.
b. Models WE-8 and WE-9 were introduced on October 1 of last year. They are lighter versions of the traditional weed eater and are designed for smaller households or condo units. Norton estimates that demand for both models will continue at the previous year's rate.
c. A competitor has announced plans to introduce an improved version of model WE-6, Norton's traditional weed eater. Norton believes that the model WE-6 price must be cut 20 percent to maintain unit sales at the previous year's level.
d. It was assumed that unit sales of all other models would increase by 10 percent, prices remaining constant.

Required:

Prepare a sales budget by product and in total for Norton Inc. for the coming year.

9 ACCOUNTS RECEIVABLE AGING SCHEDULE AND CASH BUDGET

Janzen Inc. sells all of its product on account. Janzen has the following accounts receivable payment experience:

Percent paid in the month of sale	20
Percent paid in the month after the sale	60
Percent paid in the second month after the sale	15

To encourage payment in the month of sale, Janzen gives a 2 percent cash discount. Jan-zen's anticipated sales for the next few months are as follows:

April $200,000
May 220,000
June 230,000
July 210,000
August 250,000

Required:

1. Prepare a schedule of cash receipts for July.
2. Prepare a schedule of cash receipts for August.

10 CASH BUDGET

The owner of a small mining supply company has requested a cash budget for June. After examining the records of the company, you find the following:

a. Cash balance on June 1 is $830.
b. Actual sales for April and May are as follows:

April	May

Cash sales	$10,000 $15,000
Credit sales	25,000 35,000
Total sales	$35,000 $50,000

c. Credit sales are collected over a three-month period: 50 percent in the month of sale, 30 percent in the second month, and 15 percent in the third month. The sales collected in the third month are subject to a 1 percent late fee, which is paid by those customers in addition to what they owe. The remaining sales are uncollectible.
d. Inventory purchases average 75 percent of a month's total sales. Of those purchases, 20 percent are paid for in the month of purchase. The remaining 80 percent are paid for in the following month.
e. Salaries and wages total $8,700 per month, including a $4,500 salary paid to the owner.
f. Rent is $1,340 per month.
g. Taxes to be paid in June are $5,500.

The owner also tells you that he expects cash sales of $15,000 and credit sales of $50,000 for June. No minimum cash balance is required. The owner of the company doesn't have access to short-term loans.

Required:

1. Prepare a cash budget for June. Include supporting schedules for cash collections and cash payments.
2. Did the business show a negative cash balance for June? Assuming that the owner has no hope of establishing a line of credit for the business, what recommendations would you give the owner for dealing with a negative cash balance?

11 OPERATING BUDGET, COMPREHENSIVE ANALYSIS

Woodruff Manufacturing produces a subassembly used in the production of jet aircraft engines. The assembly is sold to engine manufacturers and aircraft maintenance facilities. Projected sales for the coming four months follow:

January	40,000
February	50,000
March	60,000
April	60,000

The following data pertain to production policies and manufacturing specifications followed by Woodruff Manufacturing:

a. Finished goods inventory on January 1 is 32,000 units, each costing $148.71. The desired ending inventory for each month is 80 percent of the next month's sales.
b. The data on materials used are as follows:

Direct Material	**Per-Unit Usage**	**Unit Cost ($)**
Metal	10lbs.	8
Components	6	2

Inventory policy dictates that sufficient materials be on hand at the beginning of the month to produce 50 percent of that month's estimated sales. This is exactly the amount of material on hand on January 1.
c. The direct labor used per unit of output is four hours. The average direct labor cost per hour is $9.25.
d. Overhead each month is estimated using a flexible budget formula. (Activity is measured in direct labor hours.)

	Fixed-Cost Component ($)	Variable-Cost Component ($)
Supplies	—	1.00
Power	—	0.50
Maintenance	30,000	0.40
Supervision	16,000	—
Depreciation	200,000	—
Taxes	12,000	—
Other	80,000	1.50

e. Monthly selling and administrative expenses are also estimated using a flexible budgeting formula. (Activity is measured in units sold.)

	Fixed Costs ($)	Variable Costs ($)
Salaries	50,000	—
Commissions	—	2.00
Depreciation	40,000	—
Shipping	—	1.00
Other	20,000	0.60

f. The unit selling price of the subassembly is $180.
g. All sales and purchases are for cash. The cash balance on January 1 equals $400,000. If the firm develops a cash shortage by the end of the month, sufficient cash is bor rowed to cover the shortage. Any cash borrowed is repaid at the end of the quarter, as is the interest due (cash borrowed at the end of the quarter is repaid at the end of the following quarter). The interest rate is 12 percent per annum. No money is owed at the beginning of January.

Required:

1. Prepare a monthly operating budget for the first quarter with the following schedules. (Assume that there is no change in work-in-process inventories.)
   a. Sales budget
   b. Production budget
   c. Direct materials purchases budget
   d. Direct labor budget
   e. Overhead budget
   f. Selling and administrative expenses budget
   g. Ending finished goods inventory budget
   h. Cost of goods sold budget
   i. Budgeted income statement j. Cash budget
2. Form a group with two or three other students. Locate a manufacturing plant in your community that has headquarters elsewhere. Interview the controller for the plant regarding the master budgeting process. Ask when the process starts each year, what schedules and budgets are prepared at the plant level, how the controller fore casts the amounts, and how those schedules and budgets fit in with the overall cor porate budget. Is the budgetary process participative? Also, find out how budgets are used for performance analysis. Write a summary of the interview.

12 CASH BUDGET, PRO FORMA BALANCE SHEET

Ryan Richards, controller for Grange Retailers, has assembled the following data to assist in the preparation of a cash budget for the third quarter of 2010:
a.Sales:

May (actual)	$100,000

June (actual)	120,000
July (estimated)	90,000
August (estimated)	100,000
September (estimated)	135,000
October (estimated)	110,000

b. Each month, 30 percent of sales are for cash and 70 percent are on credit. The collection pattern for credit sales is 20 percent in the month of sale, 50 percent in the following month, and 30 percent in the second month following the sale.
c. Each month, the ending inventory exactly equals 50 percent of the cost of next month's sales. The markup on goods is 25 percent of cost.
d. Inventory purchases are paid for in the month following the purchase.
e. Recurring monthly expenses are as follows:

Salaries and wages	$10,000
Depreciation on plant and equipment	4,000
Utilities	1,000
Other	1,700

f. Property taxes of $15,000 are due and payable on July 15, 2010. Advertising fees of $6,000 must be paid on August 20, 2010.
g. A lease on a new storage facility is scheduled to begin on September 2, 2010. Monthly payments are $5,000.
h. The company has a policy to maintain a minimum cash balance of $10,000. If necessary, it will borrow to meet its short-term needs. All borrowing is done at the beginning of the month. All payments on principal and interest are made at the end of a month.
i. The annual interest rate is 9 percent. The company must borrow in multiples of $1,000.
j. A partially completed balance sheet as of June 30, 2010, follows. (Accounts payable is for inventory purchases only.)

Cash	$?	
Accounts receivable	?	
Inventory	?	
Plant and equipment	425,000	
Accounts payable		$?
Common stock		210,000
Retained earnings		268,750
Total	$?	$?

Required

Complete the balance sheet given in item j.
Prepare a cash budget for each month in the third quarter and for the quarter in total (the third quarter begins on July 1). Provide a supporting schedule of cash collections.
Prepare a pro forma balance sheet as of September 30, 2010.

Form a group with two or three other students. Discuss why a bank might require a cash budget for businesses that are seeking short-term loans. Determine what other financial reports might be useful for a loan decision. Also, discuss how the reliability of cash budgets and other financial information can be determined.

13 PARTICIPATIVE BUDGETING, NOT-FOR-PROFIT SETTING

Dwight D. Eisenhower was the 34th president of the United States and the Supreme Commander of the Allied Forces during World War II. Much of his army career was spent in planning. He once said that ‘‘planning is everything; the plan is nothing.’’ What do you think he meant by this? Consider his comment with respect to the master budget. Do you agree or disagree? Be sure to include the impact of the master budget on planning and control.

14 CASH BUDGET

The controller of Pratesh Company is gathering data to prepare the cash budget for July. He plans to develop the budget from the following information:

a. Of all sales, 35 percent are cash sales.

b. Of credit sales, 60 percent are collected within the month of sale. Half of the credit sales collected within the month receive a 2 percent cash discount (for accounts paid within 10 days). Twenty percent of credit sales are collected in the following month; remaining credit sales are collected the month thereafter. There are virtually no bad debts.

c. Sales for the second two quarters of the year follow. (The first three months are actual sales, and the last three months are estimated sales.)

	Sales
April	450,000
May	580,000
June	900,000
July	1,140,000
August	1,200,000
September	1,134,000

d. The company sells all that it produces each month. The cost of raw materials equals 22 percent of each sales dollar. The company requires a monthly ending inventory equal to the coming month's production requirements. Of raw materials purchases, 50 percent are paid for in the month of purchase. The remaining 50 percent is paid for in the following month.
e. Wages total $105,000 each month and are paid in the month incurred.
f. Budgeted monthly operating expenses total $336,000, of which $45,000 is depreciation and $6,000 is expiration of prepaid insurance (the annual premium of $72,000 is paid on January 1).
g. Dividends of $130,000, declared on June 30, will be paid on July 15.
h. Old equipment will be sold for $25,200 on July 4.
i. On July 13, new equipment will be purchased for $173,000.
j.The company maintains a minimum cash balance of $20,000.
k.The cash balance on July 1 is $27,000.

Required:

Prepare a cash budget for July. Give a supporting schedule that details the cash collections from sales.

15 CASH BUDGETING

Bill Anderson owns The Eatery in Miami, Florida. The Eatery is an affordable restaurant located near tourist attractions. Bill accepts cash and checks. Checks are deposited immediately. The bank charges $0.50 per check; the amount per check averages $75. Bad checks that Bill cannot collect make up 2 percent of check revenue.
During a typical month, The Eatery has sales of $75,000. About 75 percent are cash sales. Estimated sales for the next three months are as follows:

July	$60,000
August	75,000
September	80,000

Bill thinks that it may be time to refuse to accept checks and to start accepting credit cards. He is negotiating with VISA/MasterCard and American Express, and he would start the new policy on April 1. Bill estimates that with the drop in sales from the no-checks policy and the increase in sales from the acceptance of credit cards, the net increase in sales will be 20 percent. The credit cards involve added costs as follows:

VISA/MasterCard: Bill will accumulate these credit card receipts throughout the month and will submit them in one bundle for payment on the last day of the month. The money will be credited to his account by the fifth day of the following month. A fee of 3.5 percent is charged by the credit card company.

American Express: Bill will accumulate these receipts throughout the month and mail them to American Express for payment on the last day of the month. American Express will credit his account by the sixth day of the following month. A fee of 5.5 percent is charged by American Express.

the following breakdown of revenues among the various payment
;

	Cash	5%
VISA/Mastercard	75%	
American Express	20%	

d:

are a schedule of cash receipts for August and September under the current policy of accepting checks.
are a schedule of cash receipts for August and September that incorporates the changes in policy.

GETING IN THE GOVERNMENT SECTOR, INTERNET RESEARCH

lar sense as companies, the U.S. government must prepare a budget each year. However, unlike private, for-profit companies, the bu
s are available to the public. The entire budgetary process is established by law. The government makes available a considerable aı
ion concerning the federal budget. Most of this information can be found on the Internet. Using Internet resources (e.g., consider acce
Management and Budget at http://www.whitehouse.gov/ omb), answer the following questions:

d:

n is the federal budget prepared?
is responsible for preparing the federal budget?
is the final federal budget determined? Explain in detail how the government creates its budget.
t percentage of the gross domestic product (GDP) is represented by the federal budget?
t are the revenue sources for the federal budget? Indicate the percentage contribution of each of the major sources.
does U.S. spending as a percentage of GDP compare with spending of other countries?
are deficits financed?

H BUDGET

ːr Jones is a successful dentist but he is experiencing recurring financial difficulties. For example, Dr. Jones owns his office building,
the professional corporation that housed his dental practice (he owns all shares in the corporation). However, Dr. Jones recently re
d letter from the Internal Revenue Service threatening to impound his business and sell its assets for the corporation's failure to pa
the past six months. Also, the corporation has had difficulty paying its suppliers, owing one of them over $200,000 plus interest. In
s had solved similar problems by borrowing money on the equity in either his personal residence or his office building. Not surprisi
s grown weary of these recurring problems and has hired a local consultant for advice on how to fix his financial problems.
ording to the analysis of the consultant, the financial difficulties facing Dr. Jones have been caused by the absence of proper plan
Budgetary control is sorely needed. To assist you in preparing a plan of action that will help his dental practice regain financial stab
s made available the financial information describing a typical month in the following table.

Revenues

	Average Fee ($)	Quantit
	$ 50	90
	300	19
ıals	170	8
	500	7
ons	45	30
g	25	108
	15	150

Costs

hone	150
)ffice supplies	100
,ab fees	5,000
,oan payments	570
ıterest payments	500
1iscellaneous	500
)epreciation	700
Total costs	$24,964

:fits include Dr. Jones's share of social security and a health insurance premium for all employees. Although all revenues billed in a n cted, the cash flowing into the business is approximately equal to the month's billings because of collections from prior months. Tl open Monday through Thursday from 8:30 a.m. to 4:00 p.m. and on Friday from 8:30 a.m. to 12:30 p.m. A total of 32 hours are wor ıditional hours could be worked, but Dr. Jones is reluctant to do so because of other personal endeavors that he enjoys.
'ones has noted that the two dental assistants and receptionist are not fully utilized. He estimates that they are busy about 65 to 70 p Dr. Jones's wife spends about five hours each week on a monthly newsletter that is sent to all patients; she also maintains a birthda: :ds to patients on their birthdays.

'ones spends about $2,400 yearly on informational seminars. These seminars, targeted especially for dentists, teach w to increase their revenues. It is from one of these seminars that Dr. Jones decided to invest in promotion and lations (the newsletter and the birthday list).

d:

are a monthly cash budget for Dr. Jones. Does Dr. Jones have a significant cash flow problem? How would you use ›udget to show Dr. Jones why he is having financial difficulties?
g the cash budget prepared in Requirement 1 and the information given in the case, recommend actions to solve Dr. s's financial problems. Prepare a cash budget that reflects these recommendations and demonstrates to Dr. Jones the problems can be corrected. Do you think that Dr. Jones will accept your recommendations? Do any of the vioral principles discussed in the chapter have a role in this type of setting? Explain.

GETARY PERFORMANCE, REWARDS, ETHICAL BEHAVIOR

lis, division manager, is evaluated and rewarded on the basis of budgetary performance. Linda, her assistants, and the plant manage: le to receive a bonus if actual divisional profits are between budgeted profits and 120 percent of budgeted profits. The bonuses are l d percentage of actual profits. Profits above 120 percent of budgeted profits earn a bonus at the 120 percent level (in other words, th limit on possible bonus payments). If the actual profits are less than budgeted profits, no bonuses are awarded. Consider the follc ıken by Linda:

a tends to overestimate expenses and underestimate revenues. This approach tates the ability of the division to attain budgeted profits. Linda believes that ction is justified because it increases the likelihood of receiving bonuses and to keep the morale of the managers high.
ose that toward the end of the fiscal year, Linda saw that the division would chieve budgeted profits. Accordingly, she instructed the sales department to the closing of a number of sales agreements to the following fiscal year. She lecided to write off some inventory that was nearly worthless. Deferring rev s to next year and writing off the inventory in a no-bonus year increased the ces of a bonus for next year.
me that toward the end of the year, Linda saw that actual profits would likely ed the 120 percent limit and that she took actions similar to those described m b.

d:

ment on the ethics of Linda's behavior. Are her actions right or wrong? What role does the company play in uraging her actions?
›ose that you are the marketing manager for the division, and you receive instructions to defer the closing of sales the next fiscal year. What would you do?
›ose that you are a plant manager, and you know that your budget has been padded by the division manager. Further, ose that the padding is common knowledge among the plant managers, who support it because it increases the ty to achieve the budget and receive a bonus. What would you do?

SOLUZIONI

Esercizio 1

Lester Company
Budgeted Income Statement
For the Coming Year

Sales ($27 × 60,000)		$1,620,000
Cost of goods sold ($18 × 60,000)		1,080,000
Gross margin	$	540,000
Less: Variable selling and administrative expenses ($2.70 × 60,000)		162,000
Fixed selling and administrative expenses		243,000
Operating income	$	135,000
Less: Income taxes (0.35 × $135,000)		47,250
Net income	$	87,750

Cornerstone Exercise 19–30

	August	September
June:		
($72,000 × 0.15)	$10,800	$ 0
July:		
($55,000 × 0.30)	16,500	
($55,000 × 0.15)		8,250
August:		
($62,000 × 0.50)	31,000	
($62,000 × 0.30)		18,600
September:		
($65,000 × 0.50)	0	32,500
Total	$58,300	$59,350

Esercizio 2

1. Payments for purchases from:

April ($468,000 × 0.70)	$327,600
May ($514,000 × 0.30)	154,200
Total cash needed for May	$481,800

2. Payments for purchases from:

May ($514,000 × 0.70)	$359,800
June ($520,000 × 0.30)	156,000
Total cash needed for June	$515,800

Esercizio 3

1. Cash receipts in October from:

Cash sales ($120,000 × 0.15)	$ 18,000
Payments on September credit sales*	28,730
Payments on October credit sales**	71,400
Total cash expected	$118,130

*$130,000 × 0.85 × 0.26 = $28,730
**$120,000 × 0.85 × 0.70 = $71,400

2. Payments for food purchases from:

September ($98,000 × 0.75)	$73,500
October ($83,000 × 0.25)	20,750
Total cash needed for June	$94,250

3.

Beginning balance	$ 7,680
Cash receipts	118,130
Cash available	$125,810
Less:	
Payments for food purchases	$ 94,250
Owners' draw	6,000
Workers' wages*	4,400
Utilities	5,200
Rent	3,600
Insurance	900
Total disbursements	$114,350
Ending balance	$ 11,460

*September wage payments = ($4,400 × 0.1);
October wage payments = ($4,400 × 0.9)

Esercizio 4

1. h, i
2. e
3. h, f
4. g
5. d
6. f
7. f
8. a
9. c
10. b