LEARNING OBJECTIVES

LO 1	Why is budgeting important?
LO 2	How is strategic planning related to budgeting?
LO 3	What is the starting point of a master budget and why?
LO 4	How are the various components in a master budget prepared, and how do they relate to one another?
LO 5	Why is the cash budget so important in the master budgeting process?
LO 6	What benefits are provided by a budget?
LO 7	(Appendix) How does a budget manual facilitate the budgeting process?

QUESTION GRID

True/False

	Difficulty Level			Learning Objectives						
	Easy	Moderate	Difficult	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6	LO 7
1	x				x					
2	x				x					
3	x			x						
4	x				x					
5	x				x					
6	x				x					
7	x				x					
8		x			x					
9	x					x				
10	x					x				
11	x					x				
12	x					x				
13	x					x				
14		x				x				
15		x				x				
16		x					x			
17		x					x			
18	x						x			
19	x						x			
20	x						x			
21		x					x			
22		x					x			
23	x							x		
24		x						x		
25		x						x		
26	x							x		
27	x								x	
28	x								x	
29		x							x	
30	x								x	
31		x								x

	Difficulty Level			Learning Objectives						
	Easy	**Moderate**	**Difficult**	**LO 1**	**LO 2**	**LO 3**	**LO 4**	**LO 5**	**LO 6**	**LO 7**
32		x								x
33	x									x
34		x								x

Completion

	Difficulty Level			Learning Objectives						
	Easy	**Moderate**	**Difficult**	**LO 1**	**LO 2**	**LO 3**	**LO 4**	**LO 5**	**LO 6**	**LO 7**
1	x				x					
2	x				x					
3	x				x					
4	x					x				
5	x					x				
6	x					x				
7	x						x			
8	x						x			
9	x						x			
10	x						x			
11	x								x	
12	x								x	
13	x								x	
14	x								x	

Multiple Choice

	Difficulty Level			Learning Objectives						
	Easy	**Moderate**	**Difficult**	**LO 1**	**LO 2**	**LO 3**	**LO 4**	**LO 5**	**LO 6**	**LO 7**
1	x			x						
2	x			x						
3	x			x						
4	x			x						
5		x		x						
6	x			x						
7	x			x						
8	x			x						
9	x				x					
10	x				x					
11	x				x					
12	x			x						
13	x					x				
14	x					x				
15	x					x				
16	x					x				
17	x					x				
18	x					x				
19	x				x					
20	x					x				
21	x						x			
22	x						x			
23	x						x			
24	x						x			
25	x						x			

	Difficulty Level			Learning Objectives						
	Easy	Moderate	Difficult	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6	LO 7
26		x					x			
27	X						x			
28	X						x			
29	X						x			
30		x					x			
31		x					x			
32	X						x			
33	X						x			
34	X						x			
35	X						x			
36	X						x			
37	X						x			
38	X							x		
39	X							x		
40	X							x		
41	X						x			
42	X						x			
43	X						x			
44	X					x				
45	X						x			
46	X								x	
47	X								x	
48	X								x	
49	X								x	
50		x					x			
51		x					x			
52			x				x			
53			x				x			
54		x					x			
55			x				x			
56		x					x			
57		x					x			
58		x					x			
59			x				x			
60			x					x		
61		x					x			
62		x						x		
63		x						x		
64		x						x		
65		x						x		
66	X								x	
67	X									x
68	X								x	
69	X								x	
70	X					x				
71	X									x
72	X						x			
73	X						x			
74		x					x			

	Difficulty Level			Learning Objectives						
	Easy	Moderate	Difficult	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6	LO 7
75	X							x		
76			x					x		
77			x					x		
78		x						x		
79	X							x		
80		x						x		
81		x						x		
82	X							x		
83	X							x		

Short-Answer

	Difficulty Level			Learning Objectives						
	Easy	Moderate	Difficult	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6	LO 7
1		x							x	
2		x							x	
3		x					x			
4		x				x				
5		x							x	
6		x							x	

Problem

	Difficulty Level			Learning Objectives						
	Easy	Moderate	Difficult	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6	LO 7
1		x					x			
2		x					x			
3		x					x			
4		x					x			
5			x				x			
6		x					x			
7		x					x			
8			x				x			

TRUE/FALSE

1. Strategic planning is focused on short-term goals of less than five years.

   ANS: F DIF: Easy OBJ: 8-2

2. Strategic planning is focused on long-range goals of five to ten years.

   ANS: T DIF: Easy OBJ: 8-2

3. The budget is an important source of feedback for an organization.

   ANS: T DIF: Easy OBJ: 8-1

4. Most tactical plans are single use plans.

   ANS: T DIF: Easy OBJ: 8-2

5. An annual budget is an example of a strategic plan.

   ANS: F DIF: Easy OBJ: 8-2

6. An annual budget is an example of a single use tactical plan.

   ANS: T DIF: Easy OBJ: 8-2

7. Top management should be directly involved in strategic planning for an organization.

   ANS: T DIF: Easy OBJ: 8-2

8. Operational management should be directly involved with the strategic planning of an organization.

   ANS: F DIF: Moderate OBJ: 8-2

9. The financial budget is prepared before the operating budget.

   ANS: F DIF: Easy OBJ: 8-3

10. The financial budget is prepared after the operating budget.

    ANS: T DIF: Easy OBJ: 8-3

11. The operating budget is expressed both in units and dollars.

    ANS: T DIF: Easy OBJ: 8-3

12. The first stage in the budgeting process is the preparation of a sales budget.

    ANS: T DIF: Easy OBJ: 8-3

13. The first stage in the budgeting process is the preparation of a cash collections budget.

    ANS: F DIF: Easy OBJ: 8-3

14. In a manufacturing organization, the cash budget is prepared immediately after the sales budget.

ANS: F DIF: Moderate OBJ: 8-3

15. In a manufacturing organization, the production budget is prepared immediately after the sales budget.

ANS: T DIF: Moderate OBJ: 8-3

16. The amount of raw materials that must be purchased can be computed by the following formula: Beginning inventory + Materials required - Ending inventory.

ANS: F DIF: Moderate OBJ: 8-4

17. The amount of raw materials that must be purchased can be computed by the following formula: Ending inventory + Materials required - Beginning inventory.

ANS: T DIF: Moderate OBJ: 8-4

18. In estimating factory overhead, it is necessary to separate costs into their fixed and variable components.

ANS: T DIF: Easy OBJ: 8-4

19. In estimating factory overhead, it is necessary to subtract depreciation from total overhead costs.

ANS: T DIF: Easy OBJ: 8-4

20. In estimating factory overhead, it is necessary to add depreciation to total overhead costs.

ANS: F DIF: Easy OBJ: 8-4

21. The effect of capital expenditures on the master budget is reflected through periodic depreciation charges in the cash outflow portion.

ANS: F DIF: Moderate OBJ: 8-4

22. The effect of capital expenditures on the master budget is reflected through cash payments made for acquisition of capital assets.

ANS: T DIF: Moderate OBJ: 8-4

23. The cash budget is constructed after all other budgets have been completed.

ANS: T DIF: Easy OBJ: 8-5

24. Balances for Accounts Receivable and Sales Discounts are projected before the cash collections schedule is prepared.

ANS: F DIF: Moderate OBJ: 8-5

25. Balances for Accounts Receivable and Sales Discounts are projected after the cash collections schedule is prepared.

ANS: F DIF: Moderate OBJ: 8-5

26. The final step in constructing the master budget is the preparation of pro-forma financial statements for the period.

ANS: T DIF: Easy OBJ: 8-5

27. A continuous budget is prepared by adding a new budget month as each month expires.

ANS: T DIF: Easy OBJ: 8-6

28. Budgetary slack is an effective motivator for employees, because it reduces employee frustration when goals cannot be achieved.

ANS: F DIF: Easy OBJ: 8-6

29. Budgetary slack is frequently found in imposed budgets.

ANS: F DIF: Moderate OBJ: 8-6

30. A participatory budget is developed by both top management and operating personnel.

ANS: T DIF: Easy OBJ: 8-6

31. A budget manual should include pro-forma financial statements for the upcoming period.

ANS: F DIF: Moderate OBJ: 8-7

32. A budget manual should include a statement of the budgetary purpose and its desired results..

ANS: T DIF: Moderate OBJ: 8-7

33. A calendar of scheduled budgetary activities helps to coordinate the budgeting process.

ANS: T DIF: Easy OBJ: 8-7

34. Top management can reduce slack by using a bonus system to link performance to the budget.

ANS: T DIF: Moderate OBJ: Easy

COMPLETION

1. Long-range planning carried out by top management is referred to as ______________________________.

   ANS: strategic planning

   DIF: Easy OBJ: 8-2

2. Short-term planning designed to address a specific set of circumstances is referred to as _____________________________.

   ANS: tactical planning

   DIF: 8-2 OBJ: Easy

3. The final document resulting from the budgeting process is referred to as the ______________________.

   ANS: master budget

   DIF: Easy OBJ: 8-2

4. A budget that is expressed in terms of both units and dollars is referred to a an ________________________.

   ANS: operating budget

   DIF: Easy OBJ: 8-3

5. A budget that indicates the funds to be generated or consumed during the period is referred to as a __________________________.

   ANS: financial budget

   DIF: Easy OBJ: 8-3

6. The starting point for any master budget is the _________________________.

   ANS: sales budget

   DIF: Easy OBJ: 8-3

7. The ending point in the budgetary process is the _____________________________.

   ANS: pro-forma financial statements

   DIF: Easy OBJ: 8-4

8. In a manufacturing organization, the budget that is prepared after the sales budget is the __________________________.

   ANS: production budget.

   DIF: Easy OBJ: 8-4

9. In a manufacturing organization, the budgets that are prepared after the production are the ______________________, ______________________,and ___________________ budgets.

   ANS: direct materials, direct labor, overhead

   DIF: Easy OBJ: 8-4

10. The budget that focuses on an organization's long-term needs is referred to as a __________________________.

    ANS: capital budget

    DIF: Easy OBJ: 8-4

11. A budget that is prepared by adding a new budget month as each month expires is referred to as a ____.

    ANS: continuous budget.

    DIF: Easy OBJ: 8-6

12. A budget that is developed with little input from operating personnel is referred to as a(n) ______________________________________.

    ANS: imposed budget

    DIF: Easy OBJ: 8-6

13. A budget that is developed by both top management and operating personnel is referred to as a(n) ______________________________________.

    ANS: participatory budget

    DIF: Easy OBJ: 8-6

14. If revenues are intentionally underestimated during the budgeting process, ______________________ has been created.

    ANS: budgetary slack

    DIF: Easy OBJ: 8-6

MULTIPLE CHOICE

1. A budget aids in
   a. communication.
   b. motivation.
   c. coordination.
   d. all of the above.

   ANS: D DIF: Easy OBJ: 8-1

2. Measuring the firm's performance against established objectives is part of which of the following functions?
   a. Planning
   b. Controlling
   c. Organizing
   d. Staffing

   ANS: B DIF: Easy OBJ: 8-1

3. The preparation of an organization's budget
   a. forces management to look ahead and try to see the future of the organization.
   b. requires that the entire management team work together to make and carry out the yearly plan.
   c. makes performance review possible at all levels of management.
   d. all of the above.

   ANS: D DIF: Easy OBJ: 8-1

4. Which of the following is a basic element of effective budgetary control?
   a. cost behavior patterns
   b. cost-volume-profit analysis
   c. standard costing
   d. all of the above

   ANS: A DIF: Easy OBJ: 8-1

5. When actual performance varies from the budgeted performance, managers will be more likely to revise future budgets if the variances were
   a. controllable rather than uncontrollable.
   b. uncontrollable rather than controllable.
   c. favorable rather than unfavorable.
   d. small.

   ANS: B DIF: Moderate OBJ: 8-1

6. External factors that cause the achievement of company goals are the
   a. annual budget.
   b. industry price and cost structure.
   c. talents possessed by its managers.
   d. board of directors.

   ANS: B DIF: Easy OBJ: 8-1

7. A budget is
   a. a planning tool.
   b. a control tool.
   c. a means of communicating goals to the firm's divisions.
   d. all of the above.

   ANS: D DIF: Easy OBJ: 8-1

8. Ineffective budgets and/or control systems are characterized by the use of
   a. budgets as a planning tool only and disregarding them for control purposes.
   b. budgets for motivation.
   c. budgets for coordination.
   d. the budget for communication.

   ANS: A DIF: Easy OBJ: 8-1

9. Strategic planning is
   a. planning activities for promoting products for the future.
   b. planning for appropriate assignments of resources.
   c. setting standards for the use of important but hard-to-find materials.
   d. stating and establishing long-term plans.

   ANS: D DIF: Easy OBJ: 8-2

10. Key variables that are identified in strategic planning are
    a. normally controllable if they are internal.
    b. seldom if ever controllable.
    c. normally controllable if they occur in a domestic market.
    d. normally uncontrollable if they are internal.

    ANS: A DIF: Easy OBJ: 8-2

11. Tactical planning usually involves which level of management?
    a. middle
    b. top
    c. middle and top
    d. operational

    ANS: C DIF: Easy OBJ: 8-2

12. Which of the following statements is **true**?
    a. All organizations have the same set of budgets.
    b. All organizations are required to budget.
    c. Budgets are a quantitative expression of an organization's goals and objectives.
    d. Budgets should never be used to evaluate performance.

    ANS: C DIF: Easy OBJ: 8-1

13. Which of the following is **not** an "operating" budget?
    a. sales budget
    b. production budget
    c. purchases budget
    d. capital budget

    ANS: D DIF: Easy OBJ: 8-3

14. The master budget is a static budget because it
    a. is geared to only one level of production and sales.
    b. never changes from one year to the next.
    c. covers a preset period of time.
    d. always contains the same operating and financial budgets.

    ANS: A DIF: Easy OBJ: 8-3

15. The master budget is a
    a. static budget.
    b. flexible budget.
    c. qualitative expression of a prior goal.
    d. qualitative expression of a future goal.

    ANS: A DIF: Easy OBJ: 8-3

16. The master budget usually includes
    a. an operating budget.
    b. a capital budget.
    c. pro forma financial statements.
    d. all of the above.

    ANS: D DIF: Easy OBJ: 8-3

17. Which of the following is usually perceived as being the master budget's greatest advantage to management?
    a. performance analysis
    b. increased communication
    c. increased coordination
    d. required planning

    ANS: D DIF: Easy OBJ: 8-3

18. Chronologically, the first part of the master budget to be prepared would be the
    a. sales budget.
    b. production budget.
    c. cash budget.
    d. pro forma financial statements.

    ANS: A DIF: Easy OBJ: 8-3

19. An example of a recurring short-term plan is
    a. a probable product line change.
    b. expansion of plant and facilities.
    c. a unit sales forecast.
    d. a change in marketing strategies.

    ANS: C DIF: Easy OBJ: 8-2

20. If the chief accountant of a firm has to prepare an operating budget for the coming year, the first budget to be prepared is the
    a. sales budget.
    b. cash budget.
    c. purchases budget.
    d. capital budget.

    ANS: A DIF: Easy OBJ: 8-3

21. It is **least** likely that a production budget revision would cause a revision in the
    a. capital budget.
    b. cash budget.
    c. purchases budget.
    d. pro forma balance sheet.

    ANS: A DIF: Easy OBJ: 8-4

22. Budgeted production for a period is equal to
    a. the beginning inventory + sales - the ending inventory.
    b. the ending inventory + sales - the beginning inventory.
    c. the ending inventory + the beginning inventory - sales.
    d. sales - the beginning inventory + purchases.

    ANS: B DIF: Easy OBJ: 8-4

23. Chronologically, in what order are the sales, purchases, and production budgets prepared?
    a. sales, purchases, production
    b. sales, production, purchases
    c. production, sales, purchases
    d. purchases, sales, production

    ANS: B DIF: Easy OBJ: 8-4

24. The material purchases budget tells a manager all of the following **except** the
    a. quantity of material to be purchased each period.
    b. quantity of material to be consumed each period.
    c. cost of material to be purchased each period.
    d. cash payment for material each period.

    ANS: D DIF: Easy OBJ: 8-4

25. Of the following budgets, which one is **least** likely to be determined by the dictates of top management?
    a. sales
    b. material usage
    c. revenues
    d. general and administrative

    ANS: B DIF: Easy OBJ: 8-4

26. The amount of raw material purchased in a period may be different than the amount of material used that period because
    a. the number of units sold may be different from the number of units produced.
    b. finished goods inventory may fluctuate during the period.
    c. the raw material inventory may increase/decrease during the period.
    d. companies often pay for material in the period after it is purchased.

    ANS: C DIF: Moderate OBJ: 8-4

27. A purchases budget is
    a. not affected by the firm's policy of granting credit to customers.
    b. the same thing as a production budget.
    c. needed only if a firm does not pay for its merchandise in the same period as it is purchased.
    d. affected by a firm's inventory policy only if the firm purchases on credit.

    ANS: A DIF: Easy OBJ: 8-4

28. Which of the following equations can be used to budget purchases?

    (BI = beginning inventory, EI = ending inventory desired, CGS = budgeted cost of goods sold, P = budgeted purchases)
    a. P = CGS + BI - EI
    b. P = CGS + BI
    c. P = CGS + EI + BI
    d. P = CGS + EI - BI

    ANS: D DIF: Easy OBJ: 8-4

29. Both the budgeted quantity of material to be purchased and the budgeted quantity of material to be consumed can be found in the
    a. material purchases budget.
    b. production budget.
    c. pro forma income statement.
    d. cash budget.

    ANS: A DIF: Easy OBJ: 8-4

30. A company that maintains a raw material inventory, which is based on the following month's production needs, will purchase less material than it uses in a month where
    a. sales exceed production.
    b. production exceeds sales.
    c. planned production exceeds the next month's planned production.
    d. planned production is less than the next month's planned production.

    ANS: C DIF: Moderate OBJ: 8-4

31. If a company has a policy of maintaining an inventory of finished goods at a specified percentage of the next month's budgeted sales, budgeted production for January will exceed budgeted sales for January when budgeted
    a. February sales exceed budgeted January sales.
    b. January sales exceed budgeted December sales.
    c. January sales exceed budgeted February sales.
    d. December sales exceed budgeted January sales.

    ANS: A DIF: Moderate OBJ: 8-4

32. Depreciation on the production equipment would appear in which of the following budgets?
    a. cash budget
    b. production budget
    c. selling and administrative expense budget
    d. manufacturing overhead budget

    ANS: D DIF: Easy OBJ: 8-4

33. The selling, general, and administrative expense budget is based on the _______________ budget.
    a. production
    b. sales
    c. cash
    d. purchases

    ANS: B DIF: Easy OBJ: 8-4

34. The budgeted amount of selling and administrative expense for a period can be found in the
    a. sales budget.
    b. cash budget.
    c. pro forma income statement.
    d. pro forma balance sheet.

    ANS: C DIF: Easy OBJ: 8-4

35. Which of the following represents a proper sequencing in which the budgets below are prepared?
    a. Direct Material Purchases, Cash, Sales
    b. Production, Sales, Income Statement
    c. Sales, Balance Sheet, Direct Labor
    d. Sales, Production, Manufacturing Overhead

    ANS: D DIF: Easy OBJ: 8-4

36. The detailed plan for the acquisition and replacement of major portions of property, plant, and equipment is known as the
    a. capital budget.
    b. purchases budget.
    c. commitments budget.
    d. treasury budget.

    ANS: A DIF: Easy OBJ: 8-4

37. The budgeted payment for labor cost each period would be found in the
   a. labor budget.
   b. pro forma income statement.
   c. selling, general, and administrative expense budget.
   d. cash budget.

   ANS: D DIF: Easy OBJ: 8-4

38. The cash budget ignores all
   a. dividend payments.
   b. sales of capital assets.
   c. noncash accounting accruals.
   d. sales of common stock.

   ANS: C DIF: Easy OBJ: 8-5

39. Which of the following items would **not** be found in the financing section of the cash budget?
   a. cash payments for debt retirement
   b. cash payments for interest
   c. dividend payments
   d. payment of accounts payable

   ANS: D DIF: Easy OBJ: 8-5

40. The primary reason that managers impose a minimum cash balance in the cash budget is
   a. because management needs discretionary cash for unforeseen business opportunities.
   b. managers lack discipline to control their spending.
   c. that it protects the organization from the uncertainty of the budgeting process.
   d. that it makes the financial statements look more appealing to creditors.

   ANS: C DIF: Easy OBJ: 8-5

41. Chronologically, the last part of the master budget to be prepared would be the
   a. pro forma financial statements.
   b. cash budget.
   c. capital budget
   d. production budget.

   ANS: A DIF: Easy OBJ: 8-4

42. The pro forma income statement is **not** a component of the
   a. master budget.
   b. financial budgets.
   c. operating budgets.
   d. capital budget.

   ANS: C DIF: Easy OBJ: 8-4

43. A pro forma financial statement is
   a. a financial statement for past periods.
   b. a projected or budgeted financial statement.
   c. presented for the form but contains no dollar amounts.
   d. a statement of planned production.

   ANS: B DIF: Easy OBJ: 8-4

44. A master budget contains which of the following?

	Sales	Production	Pro forma statements
a.	yes	yes	yes
b.	no	no	yes
c.	no	no	no
d.	yes	no	yes

ANS: A DIF: Easy OBJ: 8-3

45. The budgeted cost of products to be sold in a future period would be found in the
    a. production budget.
    b. sales budget.
    c. purchases budget.
    d. pro forma income statement.

ANS: D DIF: Easy OBJ: 8-4

46. A budget that includes a 12-month planning period at all times is called a ____________ budget.
    a. pro forma
    b. flexible
    c. master
    d. continuous

ANS: D DIF: Easy OBJ: 8-6

47. The method of budgeting that adds one month's budget to the end of the plan when the current month's budget is dropped from the plan is called ____________ budgeting.
    a. long-term
    b. operations
    c. incremental
    d. continuous

ANS: D DIF: Easy OBJ: 8-6

48. Slack in operating budgets
    a. results from unintentional managerial acts.
    b. makes an organization more efficient and effective.
    c. requires managers to work harder to achieve the budget.
    d. is greater when managers are allowed to participate in the budgeting process.

ANS: D DIF: Easy OBJ: 8-6

49. Budget slack is a condition in which
    a. demand is low at various times of the year.
    b. excess machine capacity exists in some areas of the plant.
    c. there is an intentional overestimate of expenses or an underestimate of revenues.
    d. managers grant favored employees extra time off.

ANS: C DIF: Easy OBJ: 8-6

50. Ebony Company has the following expected pattern of collections on credit sales: 70 percent collected in the month of sale, 15 percent in the month after the month of sale, and 14 percent in the second month after the month of sale. The remaining 1 percent is never collected. At the end of May, Ebony Company has the following accounts receivable balances:

From April sales	$21,000
From May sales	48,000

Ebony's expected sales for June are $150,000. What were total sales for April?

a. $150,000
b. $72,414
c. $70,000
d. $140,000

ANS: D

Balance in A/R from April sales: $21,000/0.15 = $140,000
15% represents the amount of April receivables uncollected at the end of May.

DIF: Moderate OBJ: 8-4

51. Ball Company has a policy of maintaining an inventory of finished goods equal to 30 percent of the following month's sales. For the forthcoming month of March, Ball has budgeted the beginning inventory at 30,000 units and the ending inventory at 33,000 units. This suggests that

a. February sales are budgeted at 10,000 units less than March sales.
b. March sales are budgeted at 10,000 units less than April sales.
c. February sales are budgeted at 3,000 units less than March sales.
d. March sales are budgeted at 3,000 units less than April sales.

ANS: B

Increase in inventory = 3,000 units
3,000/0.30 = 10,000 increase for April over March.

DIF: Moderate OBJ: 8-4

52. Budgeted sales for the first six months for Porter Corp. are listed below:

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
UNITS:	6,000	7,000	8,000	7,000	5,000	4,000

Porter Corp. has a policy of maintaining an inventory of finished goods equal to 40 percent of the next month's budgeted sales. If Porter Corp. plans to produce 6,000 units in June, what are budgeted sales for July?

a. 3,600 units
b. 1,000 units
c. 9,000 units
d. 8,000 units

ANS: C

Beginning Inventory for June	1,600	units (4,000 * 40%)
Produced in June	6,000	units
Deduct: June sales	(4,000)	units
Ending inventory for June	3,600	units

3,600/0.40 = 9,000 units

DIF: Difficult OBJ: 8-4

53. Weaver Co. manufactures card tables. The company has a policy of maintaining a finished goods inventory equal to 40 percent of the next month's planned sales. Each card table requires 3 hours of labor. The budgeted labor rate for the coming year is $13 per hour. Planned sales for the months of April, May, and June are respectively 4,000; 5,000; and 3,000 units. The budgeted direct labor cost for June for Weaver Co. is $136,500. What are budgeted sales for July for Weaver Co.?

a. 3,500 units
b. 4,250 units
c. 4,000 units
d. 3,750 units

ANS: B

Card tables to be produced in June:
$136,500 / $13 = 10,500 hours 10,500 hrs/3 hrs/table = 3,500 card tables

Beginning Inventory for July	1,200	units (3,000 * 40%)
Produced in June	3,500	units
Deduct: June sales	(3,000)	units
Ending inventory for June	1,700	units

1,700/0.40 = 4,250 units

DIF: Difficult OBJ: 8-4

54. Budgeted sales for Knox Inc. for the first quarter the year are shown below:

	JANUARY	FEBRUARY	MARCH
UNITS:	35,000	25,000	32,000

The company has a policy that requires the ending inventory in each period to be 10 percent of the following period's sales. Assuming that the company follows this policy, what quantity of production should be scheduled for February?

a. 24,300 units
b. 24,700 units
c. 25,000 units
d. 25,700 units

ANS: D

Ending Inventory, February	3,200 units
February Sales	25,000 units
Requirements for Month	28,200 units
Less Beginning Inventory, February	(2,500) units
Production scheduled for February	25,700 units

DIF: Moderate OBJ: 8-4

55. Budgeted sales for the first six months the year for Gibson Corporation are listed below:

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
UNITS:	6,000	7,000	8,000	7,000	5,000	4,000

Gibson Corporation has a policy of maintaining an inventory of finished goods equal to 40 percent of the next month's budgeted sales. How many units has Gibson Corporation budgeted to produce in the first quarter of the year?

a. 21,400 units
b. 20,600 units
c. 19,000 units
d. 23,000 units

ANS: A

Desired ending inventory March 31	2,800 units
Sales: 1st quarter	21,000 units
Inventory needs	23,800 units
Beginning inventory, January 1	(2,400) units
Production	21,400 units

DIF: Difficult OBJ: 8-4

56. Production of Product X has been budgeted at 200,000 units for May. One unit of X requires 2 lbs. of raw material. The projected beginning and ending materials inventory for May are:

Beginning inventory: 2,000 lbs.
Ending inventory: 10,000 lbs.
How many lbs. of material should be purchased during May?

a. 192,000
b. 208,000
c. 408,000
d. 416,000

ANS: C

Ending inventory--May	10,000 lbs.
Production needs: 200,000 units * 2 lbs/unit	400,000 lbs.
Inventory needed	410,000 lbs.
Beginning inventory--May	(2,000) lbs.
Total purchase requirements	408,000 lbs.

DIF: Moderate OBJ: 8-4

Xanadu Company manufactures toy airplanes. Information on Xanadu Company's labor costs follow:

Sales commissions	$5 per plane
Administration	$10,000 per month
Indirect factory labor	$3 per plane
Direct factory labor	$5 per plane

The following information applies to the upcoming month of July for Xanadu Company:

Budgeted production	1,200 units
Budget sales	1,000 units

57. Refer to Xanadu Company. What amount of budgeted labor cost would appear in the July selling, general, and administrative expense budget?

a. $10,000
b. $16,000
c. $15,000
d. $23,000

ANS: C

Sales Commissions (1,000 units * $5/plane	$ 5,000
Administration	$10,000
Labor in SG&A	$15,000

DIF: Moderate OBJ: 8-4

58. Refer to Xanadu Company. What is Xanadu's budgeted factory labor cost for July?

a. $8,000
b. $15,600
c. $25,600
d. $9,600

ANS: D

Direct labor per unit	$5.00/unit
Indirect labor per unit	3.00/unit
	8.00/unit
Units produced	1,200 units
Total budgeted labor cost	$9,600

DIF: Moderate OBJ: 8-4

59. Harrison Company manufactures card tables. The company has a policy of maintaining a finished goods inventory equal to 40 percent of the next month's planned sales. Each card table requires 3 hours of labor. The budgeted labor rate for the coming year is $13 per hour. Planned sales for the months of April, May, and June are respectively 4,000; 5,000; and 3,000 units. What is Harrison Company's budgeted direct labor cost for May?
a. $54,600
b. $163,800
c. $226,200
d. $179,400

ANS: D

Ending Inventory, May	1,200 units
Sales: May	5,000 units
Requirements for May	6,200 units
Less: Beginning Inventory, May	1,600 units
Units to be produced	4,600 units
	3 hrs/unit * $13/hr
	$179,400

DIF: Difficult OBJ: 8-4

60. Edwards Company has the following expected pattern of collections on credit sales: 70 percent collected in the month of sale, 15 percent in the month after the month of sale, and 14 percent in the second month after the month of sale. The remaining 1 percent is never collected.

At the end of May, Edwards Company has the following accounts receivable balances:

From April sales	$21,000
From May sales	48,000

Edwards expected sales for June are $150,000. How much cash will Edwards Company expect to collect in June?
a. $127,400
b. $129,000
c. $148,600
d. $152,520

ANS: C

June sales ($150,000 * 70%)	$105,000
May sales (160,000 * 15%)	24,000
April sales (140,000 * 14%)	19,600
Total cash collections--June	$148,600

DIF: Difficult OBJ: 8-5

61. For the month of October, P Corp. predicts total cash collections to be $1 million. Also for October, P Corp. estimates that its beginning cash balance will be $50,000 and that it will borrow cash in the amount of $70,000. If P Corp. estimates an ending cash balance of $30,000 for October, what must its projected cash disbursements be?
a. $1,090,000
b. $1,120,000
c. $1,070,000
d. $1,020,000

ANS: A

Beginning Cash Balance	$ 50,000
Cash Collections	1,000,000
Borrowings	70,000
Cash Available	1,120,000
Less: Ending Cash Balance	30,000
Projected Cash Disbursements	$1,090,000

DIF: Moderate OBJ: 8-4

62. Esterwood Hospital has provided you with the following budget information for April:

Cash collections	$876,000
April 1 cash balance	23,000
Cash disbursements	978,600

Esterwood has a policy of maintaining a minimum cash balance of $20,000 and borrows only in $1,000 increments. How much will Esterwood borrow in April?
a. $80,000
b. $79,600
c. $99,000
d. $100,000

ANS: D

April 1 balance	$ 23,000
Add: Cash Collections	876,000
	$899,000
Deduct: Cash Disbursements	978,600
Cash Deficit	$(79,600)
Minimum Cash Balance	20,000
Amount to Borrow	$ 99,600 rounded up to $100,000

DIF: Moderate OBJ: 8-5

Triple P Companies

	CASH BUDGET		
	Company A	Company B	Company C
Beginning cash balance	$100	$300	$700
Cash collections	?	400	?
Cash disbursements	500	?	600
Cash excess (shortage)	?	?	400
Borrowing (repayments)	300	100	?
Ending cash	200	200	100

63. Refer to Triple P Companies. For Company A, what are the budgeted cash collections?
a. $700
b. $500
c. $300
d. $400

ANS: C

Ending Cash	$ 200
Deduct Borrowings	(300)
Cash Shortage	$(100)
Add Disbursements	500
Deduct Beginning cash	(100)
Budgeted cash collections	$ 300

DIF: Moderate OBJ: 8-5

64. Refer to Triple P Companies. For Company B, what are the budgeted cash disbursements?
a. $600
b. $700
c. $500
d. $400

ANS: A

Ending Cash	$ 200
Deduct Borrowings	(100)
Cash Balance	$ 100
Deduct collections	(400)
Deduct Beginning cash	(300)
Budgeted cash disbursements	$(600)

DIF: Moderate OBJ: 8-5

65. Refer to Triple P Companies. For Company C, what are the budgeted cash collections?
a. $200
b. $300
c. $400
d. $500

ANS: B

Ending Cash	$ 100
Add Repayments	300
Cash Balance	$ 400
Add disbursements	600
Deduct Beginning cash	(700)
Budgeted cash collections	$ 300

DIF: Moderate OBJ: 8-5

66. Managers may be more willing to accept a budget if
   a. it is continuous.
   b. it is imposed.
   c. it is very hard to attain.
   d. they can participate in its development.

   ANS: D DIF: Easy OBJ: 8-6

67. A budget manual should include which of the following?
   a. a list of specific budgetary activities to be performed
   b. original, revised, and approved budgets
   c. a calendar of scheduled budgetary activities
   d. all of the above

   ANS: D DIF: Easy OBJ: 8-7

68. Which of the following is **not true** about an imposed budget?
   a. It reduces the budgeting process time frame.
   b. It uses the knowledge of top management as it relates to resource availability.
   c. It enhances coordination.
   d. It increases the feeling of teamwork.

   ANS: D DIF: Easy OBJ: 8-6

69. A disadvantage of participatory budgets is that
   a. there is a high degree of acceptance of the goals and objectives by operating management.
   b. they are usually more realistic.
   c. they lead to better morale and higher motivation.
   d. they usually require more time to prepare.

   ANS: D DIF: Easy OBJ: 8-6

70. The master budget
   a. reflects the determination of an organization's cost of capital.
   b. serves as a managerial tool for the organization.
   c. includes only an organization's pro forma financial statements.
   d. utilizes only information from the financial accounting system.

   ANS: B DIF: Easy OBJ: 8-3

71. Which of the following items should NOT be included in a company’s budget manual?
   a. sample budgetary forms
   b. a statement of desired results of the budget
   c. a listing of budgetary activities to be performed
   d. financial statements for the upcoming fiscal year

   ANS: D DIF: Easy OBJ: 8-7

Krebs Company

Krebs Company is preparing its Manufacturing Overhead budget for the second quarter of the year. Budgeted variable factory overhead is $3.00 per unit produced; budgeted fixed factory overhead is $75,000 per month, with $16,000 of this amount being factory depreciation.

72. Refer to Krebs Company. If the budgeted production for April is 6,000 units, then the total budgeted factory overhead for April is:
    a. $77,000
    b. $82,000
    c. $85,000
    d. $93,000

    ANS: D

(6,000 units * $3.00/unit) + $75,000 = $93,000 Variable Fixed

    DIF: Easy OBJ: 8-4

73. Refer to Krebs Company. If the budgeted production for May is 5,000 units, then the total budgeted factory overhead per unit:
    a. $15
    b. $18
    c. $20
    d. $22

    ANS: B

$3.00/unit + ($75,000/5,000 units) = $18/unit Variable Fixed

    DIF: Easy OBJ: 8-4

74. Refer to Krebs Company. If the budgeted cash disbursements for factory overhead for June are $80,000, then the budgeted production for June must be:
    a. 7,400 units
    b. 6,200 units
    c. 6,500 units
    d. 7,000 units

    ANS: D

$80,000 + $16,000 = $96,000 Budgeted Factory Overhead $96,000 - $75,000 = $21,000 Budgeted Variable Overhead/$3.00 per unit = 7,000 units

    DIF: Moderate OBJ: 8-4

Evita Company

Evita Company, a reseller of women's fashions, has budgeted its activity for March. The budget information is presented below:

I. Sales are $550,000. All sales are cash.
II. Merchandise inventory on February 28 is $300,000
III. Budgeted depreciation for March is $35,000.
IV. Cash in bank on March 1 is $25,000.
V. Selling and administrative expenses are budgeted at $60,000 for March and are paid in cash.
VI. The planned merchandise inventory on March 31 is $270,000.
VII. The invoice cost for merchandise purchases represents 75% of sales price. All purchases are paid for in cash.

75. Refer to Evita Company. The budgeted cash receipts for March are:

a. $412,500	c. $585,000
b. $137,500	d. $550,000

ANS: D

Cash sales = $550,000

DIF: Easy OBJ: 8-5

76. Refer to Evita Company. The budgeted cash disbursements for March are:

a. $382,500	c. $472,500
b. $442,500	d. $477,500

ANS: B

Cost of Goods Sold = ($550,000 * .75) = $412,500
Purchases = $(270,000 + 412,500 - 300,000) = $382,500
S&A Expenses = $60,000

Cash disbursements = $382,500 + $60,000 = $442,500.

DIF: Difficult OBJ: 8-5

77. Refer to Evita Company. The budgeted net income for December is:

a. $107,500	c. $ 42,500
b. $137,500	d. $ 77,500

ANS: C

Net Income = Sales - Cost of Goods Sold - S&A Expenses - Depreciation
= $(550,000 - 412,500 - 60,000 - 35,000)
= $42,500

DIF: Difficult OBJ: 8-5

Gleason Company

Gleason Company prepared a cash budget by quarters for the upcoming year. Missing data amounts are indicated with question marks or lower case letters; these lower case letters will be referred to in the questions that follow.

Gleason requires a minimum balance of $10,000 to start a quarter.

All data are in thousands.

Gleason Corporation
Cash Budget

	QTR 1	QTR 2	QTR 3	QTR 4
Cash balance, beginning	$16	$ e	$13	$10
Add collections from customers	a	70	67	80
Total cash available	?	?	80	90
Less disbursements:				
Purchase of inventory	31	c	40	35
Operating expenses	35	22	?	15
Equipment purchases	10	14	19	0
Dividends	0	6	0	5
Total disbursements	66	?	f	55
Excess (deficiency) of cash available over disbursements	7	17	(2)	35
Financing:				
Borrowings:	b	--	12	--
Repayments (including interest)	--	d	--	(21)
Total financing	?	?	12	(21)
Cash balance, ending	$10	$?	$10	$14
	====	====	====	====

78. Refer to Gleason Company. The collections from customers during the first quarter (item a) are:

a. $50
b. $60
c. $57
d. $73

ANS: C

Total cash available = Excess of cash available over disbursements + Total disbursements
= $(7 + 66)
= $73
Total cash collections from customers = Total cash available - Beginning cash balance
= $(73 - 16)
= $57

DIF: Moderate OBJ: 8-5

79. Refer to Gleason Company. The borrowing required during the first quarter to meet the minimum cash balance (item b) is:

a. $0	c. $10
b. $7	d. $ 3

ANS: D

Borrowings required = Ending cash balance - Excess of cash over disbursements
= $(10 - 7)
= $3

DIF: Easy OBJ: 8-5

80. Refer to Gleason Company. The cash disbursed for purchases during the second quarter (item c) is:

a. $13	c. $ 9
b. $55	d. $21

ANS: D

Total cash available = $80
Excess of cash available over disbursements = $17
Therefore, disbursements = $63
$(x + 22 + 14 + 6) = $63
x = $21

81. Refer to Gleason Company. The repayment (including interest) of financing during the second quarter (item d) is:

a. $ 4	c. $17
b. $ 0	d. $ 7

ANS: A

Ending balance of cash = $13 (same as beginning balance of 3rd quarter)
Excess of cash available over disbursements = $17
Repayments = $4

DIF: Moderate OBJ: 8-5

82. Refer to Gleason Company. The cash balance at the beginning of the second quarter (item e) is:

a. $10	c. $ 0
b. $14	d. $ 7

ANS: A

Beginning cash balance for second quarter is the same as ending balance for first quarter: $10.

DIF: Easy OBJ: 8-5

83. Refer to Gleason Company. The total disbursements during the third quarter (item f) is:

a. $84	c. $82
b. $78	d. $59

ANS: C

Deficiency of cash disbursements over cash available	= $(2)
Cash available	=$80
Cash disbursements	=$82

DIF: Easy OBJ: 8-5

SHORT ANSWER

1. Explain why managers might want to build slack into a budget.

   ANS:
   Building slack into the budget allows managers to achieve the budgeted level of performance with less effort. Thus, they have a higher probability of achieving the budget and any bonus or compensation that may be tied to that performance standard.

   DIF: Moderate OBJ: 8-6

2. What role does the budgeting activity play in managerial compensation and performance evaluation?

   ANS:
   Once set, the budget is not only a plan for the organization, but it becomes a standard against which actual performance may be compared. Recognizing the budget as a performance standard, organizations may base employee compensation (to some extent) on how well actual performance compares to the budgeted performance. Such a compensatory arrangement frequently involves a bonus plan that permits bonuses to go up as performance relative to the budget goes up.

   DIF: Moderate OBJ: 8-6

3. Why will there frequently be a difference between the budgeted cost of material in the material purchases budget and the budgeted cash disbursement for material in the cash budget?

   ANS:
   Because firms do not necessarily pay for material in the same period in which they are purchased, the amounts in these two budgets will frequently differ. The material purchases budget is based on the cost of material purchased in a period while the cash budget only reflects expected actual payments for material in the period.

   DIF: Moderate OBJ: 8-4

4. Explain why different types of organizations will have different sets of budgets.

   ANS:
   We may think of the set of budgets as the plan for producing outputs and acquiring inputs. As different organizations have different inputs and outputs, we would naturally expect them to have different budgets. For example, a retailing firm would find no need for a production budget because it does not manufacture anything. On the other hand, the need for a production budget in a manufacturing organization is obvious. Likewise, governmental organizations will have budgets that are different than private organizations.

   DIF: Moderate OBJ: 8-3

5. Why have many managers in recent years moved toward emphasizing employee participation in the budgeting process rather than simply imposing the budget on the employees?

   ANS:
   Many managers believe that the quality of the budget is enhanced through employee participation. This is attributable in part to the fact that many employees possess technical information that management does not have. Through the budgeting process this technical information is imparted to management. Further, participation in the budgeting process may lead employees to be more attentive to the budget and feel like a more important part of the organizational team. Employees feel more committed to meeting a budget they helped prepare. Preparing a budget gives the preparer management training, which makes him or her better prepared for advancement in the company.

   DIF: Moderate OBJ: 8-6

6. What are some of the benefits of a well-prepared budget?

   ANS:
   1. The budget help managers align activities and resource allocations with organizational goals.
   2. The budget can help promote employee participation, cooperation, and departmental coordination.
   3. The budget enhances conduct of the managerial functions of planning, controlling, problem solving, and performance evaluation.
   4. The budget can sharpen management’s responsiveness to changes in both external and internal factors.
   5. The budget is a model of future performance of a business in time to consider alternative measures.

   DIF: Moderate OBJ: 8-6

PROBLEM

1. Cline Company has the following collection pattern for its accounts receivable:

   40 percent in the month of sale
   50 percent in the month following the sale
   8 percent in the second month following the sale
   2 percent uncollectible

   The company has recent credit sales as follows:

April:	$200,000
May:	420,000
June:	350,000

   How much should the company expect to collect on its receivables in June?

   ANS:

   JUNE COLLECTIONS

From April sales:	$200,000 × .08	$ 16,000
From May sales:	420,000 × .50	210,000
From June sales:	350,000 × .40	140,000
Total		$366,000

   DIF: Moderate OBJ: 8-4

   Oakwood Music, Inc.

   Oakwood Music, Inc. sells Baldwin pianos. The following information regarding operating costs has been extracted from budgets of Oakwood Music for December of this year and the first few months of next year:

	Dec.	Jan.	Feb.	Mar.
Payroll	$12,000	$13,000	$22,000	$16,000
Insurance	4,000	4,000	4,000	4,000
Rent	6,000	6,000	6,000	6,000
Depreciation	2,000	2,000	2,000	2,000
Taxes	1,200	1,400	2,300	2,000

   In addition to the above operating costs, enough pianos are purchased each month to maintain the inventory at 40 percent of the projected next month's sales. The firm is expected to be in compliance with this policy on December 1. Budgeted sales are:

	Dec.	Jan.	Feb.	Mar.	Apr.
Budgeted sales in units:	40	45	60	50	40

2. Refer to Oakwood Music, Inc. The average cost of a piano is $500. Merchandise is paid for in the month following its purchase. All other expenses are paid in the month in which they are incurred. On average, a piano sells for $1,500. Of each sale, 40 percent of the sales price is collected in the month of sale. The balance is collected in the month following the sale. Prepare a cash budget for the first three months of next year. The beginning cash balance on January 1 is budgeted to be $50,000.

ANS:

CASH BUDGET
Oakwood Music, Inc.

	Jan.	Feb.	Mar.
Beginning cash	$ 50,000	$ 67,600	$ 84,300
Cash collections:			
Dec. sales	36,000		
Jan. sales	27,000	40,500	
Feb. sales	36,000	54,000	
Mar. sales			30,000
Cash available	113,000	144,100	168,300
Less cash disb.	(45,400)	(59,800)	(56,000)
Ending cash	$ 67,600	$ 84,300	$112,300

DIF: Moderate OBJ: 8-4

3. Refer to Oakwood Music, Inc. The average cost of a piano is $500. Merchandise is paid for in the month following its purchase. All other expenses are paid in the month in which they are incurred. Prepare a budget of the cash disbursements for Oakwood Music, Inc. for the first three months of next year.

First, prepare a purchases budget for December through March for the pianos.

ANS:

	Dec.	Jan.	Feb.	Mar.
Required ending inventory	18	24	20	16
Projected sales	40	45	60	50
Total pianos needed	58	69	80	66
Less the beginning inventory	(16)	(18)	(24)	(20)
Pianos to be purchased	42	51	56	46
x the cost of the piano	x $500	x $500	x $500	x $500
Budgeted purchases	$21,000	$25,500	$28,000	$23,000

	Budgeted cash disbursements		
	Jan.	Feb.	Mar.
Payroll	$13,000	$22,000	$16,000
Insurance	4,000	4,000	4,000
Rent	6,000	6,000	6,000
Taxes	1,400	2,300	2,000
Merchandise purchases	21,000	25,500	28,000
Total	$45,400	$59,800	$56,000

DIF: Moderate OBJ: 8-4

Wentworth Company

Wentworth Company manufactures three products (A, B, and C) from three raw materials (X, Y, and Z). The following table indicates the number of pounds of each material that is required to manufacture each type of product:

Product	Material X	Material Y	Material Z
A	2	3	2
B	2	1	2
C	3	2	2

The company has a policy of maintaining an inventory of finished goods on all three products equal to 25 percent of the next month's budgeted sales. Listed below is the sales budget for the first quarter of 2001:

Month	Product A	Product B	Product C
Jan.	10,000	11,000	12,000
Feb.	9,000	12,000	8,000
Mar.	11,000	10,000	10,000

4. Refer to Wentworth Company. Assuming that the company meets its required inventory policy, prepare a production budget for the first 2 months of 2001 for each of the three products.

ANS:

	Product A	
	January	February
Required ending inventory	2,250	2,750
Projected sales	10,000	9,000
Total production needs	12,250	11,750
Less the beginning inventory	(2,500)	(2,250)
Budgeted production	9,750	9,500

	Product B	
	January	February
Required ending inventory	3,000	2,500
Projected sales	11,000	12,000
Total production needs	14,000	14,500
Less the beginning inventory	(2,750)	(3,000)
Budgeted production	11,250	11,500

	Product C	
	January	February
Required ending inventory	2,000	2,500
Projected sales	12,000	8,000
Total production needs	14,000	10,500
Less the beginning inventory	(3,000)	(2,000)
Budgeted production	11,000	8,500

DIF: Moderate OBJ: 8-4

5. Refer to Wentworth Company. Unit costs of materials X, Y, and Z are respectively \$4, \$3, and \$5. The Wentworth Company has a policy of maintaining its raw material inventories at 50 percent of the next month's production needs. Assuming that this policy is satisfied, prepare a material purchases budget for all three materials in both pounds and dollars for January.

ANS:

Material X Purchases

	Product A		Product B		Product C	
	Jan.	Feb.	Jan.	Feb.	Jan.	Feb.
Prod.	9,750	9,500	11,250	11,500	11,000	8,500
× lbs.	x 2	x 2	x 2	x 2	x 3	x 3
Tot.	19,500	19,000	22,500	23,000	33,000	25,500

Required EI (19,000 + 23,000 + 25,500) × .50 =	33,750
Needed: (19,500 + 22,500 + 33,000) =	75,000
Total raw material X needed:	108,750
Less: BI (75,000 × .50)	(37,500)
Material X to be purchased in January (pounds):	71,250
Multiply by cost of Material X per lb.:	x $4
Budgeted Cost of Material X for January:	$285,000

Material Y Purchases

	Product A		Product B		Product C	
	Jan.	Feb.	Jan.	Feb.	Jan.	Feb.
Prod.	9,750	9,500	11,250	11,500	11,000	8,500
× lbs.	x 3	x 3	x 1	x 1	x 2	x 2
Tot.	29,250	28,500	11,250	11,500	22,000	17,000

Required EI (28,500 + 11,500 + 17,000) × .50 =	28,500
Needed: (29,250 + 11,250 + 22,000) =	62,500
Total raw material Y needed:	91,000
Less BI (62,500 × .50)	(31,250)
Material Y to be purchased in January (pounds):	59,750
Multiply by cost of Material Y per lb.:	x $3
Budgeted Cost of Material Y for January:	$179,250

Material Z Purchases

	Product A		Product B		Product C	
	Jan.	Feb.	Jan.	Feb.	Jan.	Feb.
Prod.	9,750	9,500	11,250	11,500	11,000	8,500
x lbs.	x 2	x 2	x 2	x 2	x 2	x 2
Tot.	19,500	19,000	22,500	23,000	22,000	17,000

Required EI (19,000 + 23,000 + 17,000) × .50 =	29,500
Needed: (19,500 + 22,500 + 22,000) =	64,000
Total raw material Z needed:	93,500
Less BI (64,000 × .50)	(32,000)
Material Z to be purchased in January (pounds):	61,500
Multiply by cost of Material Z per lb.:	x 5
Budgeted Cost of Material Z for January:	$307,500
The budgeted cost of all materials to be purchased in Jan. would be $285,000 + $179,250 + $307,500 =	$771,750

DIF: Difficult OBJ: 8-4

6. Shown below are the totals from period budgets of Miller Corporation for the current year:

Revenue budget	$100,000
Materials usage from production budget	15,000
Labor cost budget	20,000

Manufacturing overhead budget	20,000
General and administrative budget	30,000
Capital expenditure budget	20,000
Work in Progress Inventories:	
Beginning of Year	10,000
End of Year	5,000
Finished Goods Inventory:	
Beginning of Year	15,000
End of Year	10,000
Tax Rate	40%

Required: Prepare a forecasted Income Statement for the current year:

ANS:

Revenue		$100,000
Less: COGS		
COGM		
RM used (production budget)	$ 15,000	
DL (labor budget)	20,000	
Mfg. OH (OH budget)	20,000	
Current Mfg. costs	$ 55,000	
Plus: Beg. WIP	10,000	
Total In-Process	$ 65,000	
Less: End WIP	(5,000)	
COGM	$ 60,000	
Plus: Beg. FG	15,000	
Goods Avail. for Sale	$ 75,000	
Less: End FG	(10,000)	
COGS		65,000
Gross Margin		$ 35,000
Less: G & A expense budget		(30,000)
Income before income taxes		$ 5,000
Less: taxes @ 40%		(2,000)
Net Income		$ 3,000

DIF: Moderate OBJ: 8-4

7. The following are forecasts of sales and purchases for China Grove Company:

	Sales	Purchases
April	$80,000	$30,000
May	90,000	40,000
June	85,000	30,000

All sales are on credit. Records show that 70 percent of the customers pay the month of the sale, 20 percent pay the month after the sale, and the remaining 10 percent pay the second month after the sale. Purchases are all paid the following month at a 2 percent discount. Cash disbursements for operating expenses in June were $5,000.

Required: Prepare a schedule of cash receipts and disbursements for June.

ANS:

Schedules of Cash Receipts and Disbursements for June

Cash Receipts:		
From current month sale (June)	(.7 × 85,000)	$59,500
From 1 month prior sale (May)	(.2 × 90,000)	18,000
From 2 month prior sale (April)	(.1 × 80,000)	8,000
Total cash receipts		$85,500
Cash Disbursements:		
May purchases @ 98% (less discount)	(.98 × 40,000)	$39,200
Operating expenses		5,000
Total cash disbursements		$44,200
Net increase in cash for June		$41,300

DIF: Moderate OBJ: 8-4

8. Allen Builders in the building construction business. In Year 2, it is expected that 40 percent of a month's sales will be collected in cash, with the balance being collected the following month. Of the purchases, 50 percent are paid the following month, 30 percent are paid in two months, and the remaining 20 percent are paid during the month of purchase. The sales force receives $2,000 a month base pay plus a 2 percent commission. Labor expenses are expected to be $4,000 a month. Other operating expenses are expected to run about $2,000 a month, including $500 for depreciation. The ending cash balance for Year 1 was $4,500.

	Sales	Purchases
Year 1-Actual		
November	$80,000	$70,000
December	90,000	80,000
Year 2-Budgeted		
January	70,000	70,000
February	90,000	60,000
March	30,000	50,000

Required:

a. Prepare a cash budget and determine the projected ending cash balances for the first three months of Year 2.

b. Determine the months that the company would either borrow or invest cash.

ANS:

a.

	Year 1		Year 2		
	Nov.	Dec.	Jan.	Feb.	Mar.
Sales	$80,000	$90,000	$70,000	$90,000	$30,000
Purchases	70,000	80,000	70,000	60,000	50,000

Cash Receipts:	Jan.	Feb.	Mar.
Beginning cash balance	$ 4,500	$ 2,600	$ 300
From current month sales	$28,000	$36,000	$12,000
From prior month sales	54,000	42,000	54,000
Total cash receipts	$82,000	$78,000	$66,000
Total cash available	$86,500	$80,600	$66,300

Cash Disbursements:

From Purchases:			
Current month @ 20%	$14,000	$12,000	$10,000
From 1 mo. prior purchases @ 50%	40,000	35,000	30,000
From 2 mo. prior purchases @ 30%	21,000	24,000	21,000
Total payments on purchases	$75,000	$71,000	$61,000
Labor expense	4,000	4,000	4,000
Sales salaries	2,000	2,000	2,000
Commissions @ 2% of sales	1,400	1,800	600
Other expenses exclude depr. ($500)	1,500	1,500	1,500
Total cash disbursements	$83,900	$80,300	$69,100
Ending cash balance	$ 2,600	$ 300	$(2,800)

b. Borrow-March; invest-January and February

DIF: Difficult OBJ: 8-4