

MULTIPLE CHOICE QUESTIONS (44 %)

Choose the correct answer

1 - Data regarding Johnsen Inc.'s forecasted dollar sales for the last seven months of the year and Johnsen's projected collection patterns are as follows.

| <u>Forecasted sales</u> | |
|-------------------------|-----------|
| June | \$700,000 |
| July | 600,000 |
| August | 650,000 |
| September | 800,000 |
| October | 850,000 |
| November | 900,000 |
| December | 840,000 |

| <u>Types of sales</u> | |
|-----------------------|-----|
| Cash sales | 30% |
| Credit sales | 70% |

| <u>Collection pattern on credit sales (5% determined to be uncollectible)</u> | |
|-------------------------------------------------------------------------------|-----|
| During the month of sale | 20% |
| During the first month following the sale | 50% |
| During the second month following the sale | 25% |

Johnsen's budgeted cash receipts from sales and collections on account for September are

- a. \$635,000.
- b. \$684,500.
- c. \$807,000.
- d. \$827,000.

2 - Tidwell Corporation sells a single product for \$20 per unit. All sales are on account, with 60% collected in the month of sale and 40% collected in the following month. A schedule of cash collections for January through March of the coming year reveals the following receipts for the period.

| | <u>Cash Receipts</u> | | |
|----------------------|----------------------|-----------------|--------------|
| | <u>January</u> | <u>February</u> | <u>March</u> |
| December receivables | \$32,000 | | |
| From January sales | 54,000 | \$36,000 | |
| From February sales | | 66,000 | \$44,000 |
| From March sales | | | 72,000 |

Other information includes the following.

- Inventories are maintained at 30% of the following month’s sales.
- Tidwell desires to keep a minimum cash balance of \$15,000. Total payments in January are expected to be \$106,500, which excludes \$12,000 of depreciation expense. Any required borrowings are in multiples of \$1,000.
- The December 31 balance sheet for the preceding year revealed a cash balance of \$24,900.

Ignoring income taxes, the financing needed in January to maintain the firm’s minimum cash balance is

- a. \$8,000.
- b. \$10,600.
- c. \$11,000.
- d. \$23,000.

3 - Tut Company’s selling and administrative costs for the month of August, when it sold 20,000 units, were as follows.

| | Costs | |
|-------------------------------------------|----------|-----------|
| | Per Unit | Total |
| Variable costs | \$18.60 | \$372,000 |
| Step costs | 4.25 | 85,000 |
| Fixed costs | 8.80 | 176,000 |
| Total selling and administrative costs | \$31.65 | \$633,000 |

The variable costs represent sales commissions paid at the rate of 6.2% of sales. The step costs depend on the number of salespersons employed by the company. In August there were 17 persons on the sales force. However, two members have taken early retirement effective August 31. It is anticipated that these positions will remain vacant for several months. Total fixed costs are unchanged within a relevant range of 15,000 to 30,000 units per month. Tut is planning a sales price cut of 10%, which it expects will increase sales volume to 24,000 units per month. If Tut implements the sales price reduction, the total budgeted selling and administrative costs for the month of September would be

- a. \$652,760.
- b. \$679,760.
- c. \$714,960.
- d. \$759,600.

4 - All of the following would appear on a projected schedule of cost of goods manufactured **except** for

- a. ending work-in-process inventory.
- b. beginning finished goods inventory.
- c. the cost of raw materials used.
- d. applied manufacturing overhead.

5 - Using the following budget data for Valley Corporation, which produces only one product, calculate the company's predetermined factory overhead application rate for variable overhead.

| | |
|-------------------------------------------------------------------|----------|
| Units to be produced | 11,000 |
| Units to be sold | 10,000 |
| Indirect materials, varying with production | \$ 1,000 |
| Indirect labor, varying with production | 10,000 |
| Factory supervisor's salary, incurred regardless of production | 20,000 |
| Depreciation on factory building and equipment | 30,000 |
| Utilities to operate factory machines | 12,000 |
| Security lighting for factory | 2,000 |
| Selling, general and administrative expenses | 5,000 |

- a. \$2.09.
- b. \$2.30.
- c. \$4.73.
- d. \$5.20.

6 - Bootstrap Corporation anticipates the following sales during the last six months of the year.

| | |
|-----------|-----------|
| July | \$460,000 |
| August | 500,000 |
| September | 525,000 |
| October | 500,000 |
| November | 480,000 |
| December | 450,000 |

20% of Bootstrap's sales are for cash. The balance is subject to the collection pattern shown below.

| | |
|--------------------------------------------------------------------|-----|
| Percentage of balance collected in the month of sale | 40% |
| Percentage of balance collected in the month following sale | 30% |
| Percentage of balance collected in the second month following sale | 25% |
| Percentage of balance uncollectible | 5% |

What is the planned net accounts receivable balance as of December 31?

- a. \$279,300.
- b. \$294,000.
- c. \$360,000.
- d. \$367,500.

7- A company has a raw material price variance that is unfavorable. An analysis of this variance indicates that the company's only available supplier of one of its raw materials unexpectedly raised the price of the material. The action management should take regarding this situation should be to

- a. negatively evaluate the performance of the purchasing manager.
- b. negatively evaluate the performance of the production manager.
- c. change the raw material price standard.
- d. ask the production manager to lower the material usage standard to compensate for higher material costs.

8 - Marten Company has a cost-benefit policy to investigate any variance that is greater than \$1,000 or 10% of budget, whichever is larger. Actual results for the previous month indicate the following.

| | <u>Budget</u> | <u>Actual</u> |
|--------------|---------------|---------------|
| Raw material | \$100,000 | \$89,000 |
| Direct labor | 50,000 | 54,000 |

The company should investigate

- a. neither the material variance nor the labor variance.
- b. the material variance only.
- c. the labor variance only.
- d. both the material variance and the labor variance.

9 - Christopher Akers is the chief executive officer of SBL Inc., a masonry contractor. The financial statements have just arrived showing a \$3,000 loss on the new stadium job that was budgeted to show a \$6,000 profit. Actual and budget information relating to the materials for the job are as follows.

| | <u>Actual</u> | <u>Budget</u> |
|----------------------------|---------------|---------------|
| Bricks - number of bundles | 3,000 | 2,850 |
| Bricks - cost per bundle | \$7.90 | \$8.00 |

Which one of the following is a **correct** statement regarding the stadium job for SBL?

- a. The price variance was favorable by \$285.
- b. The price variance was favorable by \$300.
- c. The efficiency variance was unfavorable by \$1,185.
- d. The flexible budget variance was unfavorable by \$900.

10 - Adam Corporation manufactures computer tables and has the following budgeted indirect manufacturing cost information for next year.

| | <u>Support Departments</u> | | <u>Operating Departments</u> | | |
|------------------------|----------------------------|----------------|------------------------------|--------------------|--------------|
| | <u>Maintenance</u> | <u>Systems</u> | <u>Machining</u> | <u>Fabrication</u> | <u>Total</u> |
| Budgeted overhead | \$360,000 | \$95,000 | \$200,000 | \$300,000 | \$955,000 |
| Support work furnished | | | | | |
| From Maintenance | | 10% | 50% | 40% | 100% |
| From Systems | 5% | | 45% | 50% | 100% |

If Adam uses the direct method to allocate support department costs to production departments, the total overhead (rounded to the nearest dollar) for the Machining Department to allocate to its products would be

- a. \$418,000.
- b. \$422,750.
- c. \$442,053.
- d. \$445,000.

11 - Oster Manufacturing uses a weighted-average process costing system and has the following costs and activity during October.

| | |
|-------------------------------------------|-----------------|
| Materials | \$40,000 |
| Conversion cost | <u>32,500</u> |
| Total beginning work-in-process inventory | <u>\$72,500</u> |

| | |
|----------------------------------|--------------------|
| Materials | \$ 700,000 |
| Conversion cost | <u>617,500</u> |
| Total production costs - October | <u>\$1,317,500</u> |

| | |
|-----------------------------|--------------|
| Production completed | 60,000 units |
| Work-in-process, October 31 | 20,000 units |

All materials are introduced at the start of the manufacturing process, and conversion cost is incurred uniformly throughout production. Conversations with plant personnel reveal that, on average, month-end in-process inventory is 25% complete. Assuming no spoilage, how should Oster's October manufacturing cost be assigned?

| | <u>Production Completed</u> | <u>Work-in-Process</u> |
|----|-----------------------------|------------------------|
| a. | \$1,042,500 | \$347,500. |
| b. | \$1,095,000 | \$222,500. |
| c. | \$1,155,000 | \$235,000. |
| d. | \$1,283,077 | \$106,923. |

12 - The owner of a chain of grocery stores has bought a large supply of mangoes and paid for the fruit with cash. This purchase will adversely impact which one of the following?

- a. Working capital.
- b. Current ratio.
- c. Quick or acid test ratio.
- d. Price earnings ratio.

13 - A summary of the Income Statement of Sahara Company is shown below.

| | |
|--------------------|---------------------|
| Sales | \$15,000,000 |
| Cost of sales | 9,000,000 |
| Operating expenses | 3,000,000 |
| Interest expense | 800,000 |
| Taxes | <u>880,000</u> |
| Net income | <u>\$ 1,320,000</u> |

Based on the above information, Sahara’s degree of financial leverage is

- a. 0.96.
- b. 1.36.
- c. 1.61.
- d. 2.27.

14 - Which one of the following capital budgeting techniques would always result in the same investment decision for a project as the net present value method?

- a. Discounted Payback.
- b. Internal Rate of Return.
- c. Profitability Index.
- d. Accounting Rate of Return.

Lamar Company is studying a project that would have an eight-year life and requires a \$2,400,000 investment in equipment. At the end of eight years, the project would terminate and the equipment would have no salvage value. The project would provide net operating income each year as follows:

| | |
|--------------------------------------------------------------------|-------------------|
| Sales | \$3,000,000 |
| Less variable expenses | <u>1,800,000</u> |
| Contribution margin | 1,200,000 |
| Less fixed expenses: | |
| Advertising, salaries, and other fixed out-of-pocket costs..... | \$700,000 |
| Depreciation | <u>300,000</u> |
| Total fixed expenses | <u>1,000,000</u> |
| Net operating income | <u>\$ 200,000</u> |

The company's discount rate is 12%.

15- The net annual cash inflow from the project is:

- a. \$250,000
- b. \$300,000
- c. \$500,000
- d. \$560,000

16- The project's payback period is:

- a. 6.2 years
- b. 4.8 years
- c. 8.4 years
- d. 2.6 years

17- The project's simple rate of return is:

- a. 8.6%
- b. 8.5%
- c. 8.4%
- d. 8.3%

 18 - The Liabilities and Shareholders' Equity section of Mica Corporation's Statement of Financial Position is shown below.

| | <u>January 1</u> | <u>December 31</u> |
|--------------------------------------------|------------------|--------------------|
| Accounts payable | \$ 32,000 | \$ 84,000 |
| Accrued liabilities | 14,000 | 11,000 |
| 7% bonds payable | 95,000 | 77,000 |
| Common stock (\$10 par value) | 300,000 | 300,000 |
| Reserve for bond retirement | 12,000 | 28,000 |
| Retained earnings | <u>155,000</u> | <u>206,000</u> |
| Total liabilities and shareholders' equity | <u>\$608,000</u> | <u>\$706,000</u> |

Mica's debt/equity ratio is

- a. 25.1%.
- b. 25.6%.
- c. 32.2%.
- d. 33.9%.

 The Carey Company sold 100,000 units of its product at \$20 per unit. Variable costs are \$14 per unit (manufacturing costs of \$11 and selling expenses of \$3). Fixed costs are incurred uniformly throughout the year and amount to \$792,000 (manufacturing costs of \$500,000 and selling expenses of \$292,000).

19- What is the break-even point in units and in dollars?

- a. 131,000 units – \$2,400,000
- b. 132,000 units – \$2,640,000
- c. 133,000 units – \$2,800,000
- d. 134,000 units – \$2,840,000

20- What is the number of units that must be sold to earn an income of \$60,000 before income tax?

- a. 142,000 units
- b. 143,000 units
- c. 144,000 units
- d. 145,000 units

21- What is the number of units that must be sold to earn an after-tax income of \$90,000 if the income tax rate is 40 percent?

- a. 155,000 units
- b. 156,000 units
- c. 157,000 units
- d. 158,000 units

22- What is the number of units required to break even if the labor cost is 50 percent of variable costs and 20 percent of fixed cost, and if there is a 10 percent increase in labor costs?

- a. 142,633 units
- b. 142,423 units
- c. 142,632 units
- d. 152,423 units

EXERCISES (56 %)

Exercise I (10 %)

The securities of firms A and B have the expected return and standard deviations given below; the expected correlation between the two stocks (ρ_{AB}) is 0.1.

| | Expected Return (r) | Standard Deviation (σ) |
|---|-------------------------|---------------------------------|
| A | 14% | 20% |
| B | 9% | 30% |

Required:

Compute the return and risk for each of the following portfolios:

- a- 60 percent A – 40 percent B
- b- 50 percent A – 50 percent B

Exercise II (11 %)

Charles Corporation’s balance sheet at December 31, N, shows the following:

| | |
|-----------------------------|------------------|
| Current Assets | |
| Cash | \$ 4,000 |
| Marketable Securities | \$8,000 |
| Accounts Receivable | \$100,000 |
| Inventories | \$120,000 |
| Prepaid Expenses | \$1,000 |
| Total Current Assets | \$233,000 |

| | |
|----------------------------------|------------------|
| Current Liabilities | |
| Notes Payable | \$ 5,000 |
| Accounts Payable | \$150,000 |
| Accrued Expenses | \$20,000 |
| Income Taxes Payable | \$1,000 |
| Total Current Liabilities | \$176,000 |
| Long-Term Liabilities | \$340,000 |

Required:

- Determine (a) working capital, (b) current ratio, and (c) quick ratio.
- Based on the answers to part 1, does Charles Corporation have good or poor liquidity if the industry averages are a current ratio of 1.29 and a quick ratio of 1.07?

Exercise III (35 %)

To prepare the cash budget for Suzan sole enterprise for the first quarter of year N, the following information was provided:

| Suzan Enterprise: Balance Sheet as on 31/12/N-1 | | | |
|--------------------------------------------------------|----------------|-----------------------------------|----------------|
| Assets | \$ | Liabilities | \$ |
| Fixed Assets | 300,000 | Capital | 250,000 |
| Depreciation of fixed assets | (135,000) | Result of the period—profits | 50,000 |
| Net Fixed Assets | 165,000 | Loans from financial institutions | 90,000 |
| Stock of goods | 235,000 | Suppliers | 115,000 |
| Clients | 132,000 | Social Security payable | 35,250 |
| Other accounts receivable | 18,000 | Other accounts payable | 59,750 |
| Ready cash | 75,000 | Bank – overdraft | 25,000 |
| | 625,000 | | 625,000 |

Sales and purchases of goods:

| | Actual | | Estimated | | |
|-----------|----------|----------|-----------|----------|---------|
| | November | December | January | February | March |
| Sales | 200,000 | 220,000 | 250,000 | 270,000 | 350,000 |
| Purchases | 100,000 | 120,000 | 80,000 | 100,000 | 140,000 |

- Sales occur at 40% cash and 60% during the following month.
- Purchases are settled at 25% cash, 50% during the following month and 25% during the month that follows.

Collecting accounts receivable and settling accounts payable in the launch balance sheet:

| \$ | January | February | March |
|---------------------------|---------|----------|--------|
| Other accounts receivable | 8,000 | 6,800 | 2,000 |
| Other accounts payable | 6,750 | 18,000 | 26,650 |

Other external services:

Other external services are estimated during the first quarter of year (N) as follows:

| January | February | March |
|-----------|-----------|-----------|
| \$ 30,000 | \$ 28,000 | \$ 38,000 |

- All external services are settled in cash directly.

Salaries and Social Security subscriptions:

The net monthly salaries before any deduction amounts to \$50,000 and all workers are registered in all branches of the National Social Security Fund. The salaries per employee does not exceed \$800. The subscriptions are settled quarterly during the first half of the month that follows the end of the quarter according to the following rates:

| | Worker's rate | Employer's rate |
|----------------------------------------|---------------|-----------------|
| Medical Scheme – Motherhood & Sickness | 2% | 7% |
| Family Allowance | | 6% |
| End of Service Indemnity | | 8.5% |

- These salaries are not subject to any tax deductions, and net salaries are paid cash at the end of the month.

Budget of Investment

The enterprise intends to sell one of its fixed assets in February and to purchase a substitute in March. Information about the asset to be sold is as follows:

| | |
|-----------------------------------------------|-----------|
| Cost of purchase | \$ 40,000 |
| Accumulated Depreciation up to the sales date | \$ 19,000 |

- The company estimates that it would be able to sell the asset at a profit of 20% of its book value, and to collect the sale revenue cash upon sale.
- It is also estimated that the substitute assets costs 30% more than the cost of the original sold asset and that it will only pay a quarter of the cost during March while the rest will be settled during April, May and June.

Loans from Financial Institutions

The company will settle \$30,000 of the original loan on March 31 in addition to the first quarter's interests at a rate of 6% annually.

Required:

1. Prepare budget of cash receipts for the first quarter (N).
 2. Prepare budget of payments for the first quarter (N).
 3. Prepare the cash budget for the first quarter (N).
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