

A. MULTIPLE CHOICE QUESTIONS (46%)

Broomall Corporation has decided to include certain financial ratios in its year-end annual report to shareholders. Selected information relating to its most recent fiscal year is provided below.

• Cash	\$10,000
• Accounts receivable	20,000
• Prepaid expenses	8,000
• Inventory	30,000
• Available-for-sale securities	
-At cost	9,000
-Fair value at year end	12,000
• Accounts payable	15,000
• Notes payable (due in 90 days)	25,000
• Bonds payable (due in 10 years)	35,000
• Net credit sales for year	220,000
• Cost of goods sold	140,000

1. Broomall's working capital at year end is:

- A. \$40,000.
- B. \$37,000.
- C. \$28,000.
- D. \$10,000.

2. All of the following are affected when merchandise is purchased on credit except

- A. total current assets.
- B. net working capital.
- C. total current liabilities.
- D. current ratio.

Shown below are beginning and ending balances for certain of Grimaldi Inc.'s accounts.

	<u>January 1</u>	<u>December 31</u>
Cash	\$ 48,000	\$ 62,000
Marketable securities	42,000	35,000
Accounts receivable	68,000	47,000
Inventory	125,000	138,000
Plant & equipment	325,000	424,000
Accounts payable	32,000	84,000
Accrued liabilities	14,000	11,000
7% bonds payable	95,000	77,000

3. Grimaldi's acid test ratio or quick ratio at the end of the year is:

- A. 0.83.
- B. 1.02.
- C. 1.15.
- D. 1.52.

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>

4. Based on the above information, Sahara's degree of financial leverage is

- A. 0.96.
- B. 1.36.
- C. 1.61.
- D. 2.27.

The following information has been derived from the financial statements of Boutwell Company.

Current assets	\$640,000
Total assets	990,000
Long-term liabilities	130,000
Current ratio	3.2 Times

5. The company's debt-to-equity ratio is

- A. 0.50 to 1.
- B. 0.37 to 1.
- C. 0.33 to 1.
- D. 0.13 to 1.

Lowell Corporation has decided to include certain financial ratios in its year-end annual report to shareholders. Selected information relating to its most recent fiscal year is provided below.

• Cash	\$ 10,000
• Accounts receivable (end of year)	20,000
• Accounts receivable (beginning of year)	24,000
• Inventory (end of year)	30,000
• Inventory (beginning of year)	26,000
• Notes payable (due in 90 days)	25,000
• Bonds payable (due in 10 years)	35,000
• Net credit sales for year	220,000
• Cost of goods sold	140,000

6. Using a 365-day year, compute Lowell's accounts receivable turnover in days.

- A. 26.1 days.
- B. 33.2 days.
- C. 36.5 days.
- D. 39.8 days.

7. A company interested in mitigating the risk of foreign exchange losses on sales in a foreign currency can take which of the following actions?

- A. Purchase options to sell foreign currency for local currency at a predetermined rate.
- B. Purchase options to buy foreign currency for local currency at a predetermined rate.
- C. Expand sales denominated in foreign currencies.
- D. Offer a discount for early payment of accounts receivable.

8. Which of the following actions would a more risk averse management team likely take?

- A. Purchasing forward contracts to lock in a certain amount of local currency in exchange for foreign currency to be received from sales in a foreign country.
- B. Renegotiating an equipment lease under which the company's lease payment is based on monthly sales to a new contract in which the company would make a fixed monthly payment regardless of sales.
- C. Reducing standards to grant credit to customers.
- D. Moving a manufacturing facility next to a river.

9. Which of the following is an action that will increase financial risk?

- A. Not updating anti-virus software.
- B. Borrowing money and using the cash to pay a large dividend.
- C. Eliminating dividends to conserve cash.
- D. Reducing sales commissions and increasing salaries paid to the sales staff.

Use the following to answer numbers 10 to 14

The following data are given for Alright Aluminum Company:

Initial cost of proposed equipment	\$75,000
Estimated useful life	7 years
Estimated annual savings in cash operating expenses	\$18,000
Predicted residual value at the end of the useful life	\$ 3,000
Cost of capital	12%
PV factor of an annuity of \$1 at 12%	4.564
PV factor of \$1 at year 8	0.452

10. The payback period is:

- A. 4.167 years
- B. 4.254 years
- C. 5.348 years
- D. 5.741 years

11. Present value of estimated annual savings in cash operating expenses is:

- A. \$81,485
- B. \$81,824
- C. \$82,125
- D. \$82,152

12. Present value of predicted residual value at the end of the useful life is:

- A. \$1,113
- B. \$1,263
- C. \$1,302
- D. \$1,356

13. Total present value (PV) of estimated cash flows is:

- A. \$83,508
- B. \$83,591
- C. \$83,614
- D. \$83,748

14. Net present value (NPV) of estimated cash flows is:

- A. \$8.350
- B. \$8.402
- C. \$8.479
- D. \$8.508

Use the following to answer numbers 15 and 16

The Anderson Company has recently purchased a plant to manufacture a new product. The following data pertain to the new operation:

Estimated annual sales	3,500 units at \$20
Estimated costs:	
Direct materials	\$6.00/unit
Direct labor	\$1.00/unit
Factory overhead (all fixed)	\$12,000 per year
Selling Expenses	30% of sales
Administrative expenses	\$16,000 per year

15. The break-even point in dollars is:

- A. \$77,000
- B. \$78,000
- C. \$79,000
- D. \$80,000

16. What is the selling price if the profit per unit is \$2.04?

- A. \$24.24
- B. \$24.34
- C. \$26.24
- D. \$26.34

Use the following to answer numbers 17 to 20

The following information is given for the Vendor Company:

Fixed costs..... \$30,000 per period
Variable cost..... \$5/unit
Selling price..... \$8/unit

17. The margin of safety at the 12,000 unit-level is:

- A. 16.7%
- B. 16.9%
- C. 17.1%
- D. 17.3%

18. What is the net income when the sales are \$120,000?

- A. \$13,500
- B. \$14,000
- C. \$14,500
- D. \$15,000

19. The sales in units which is required to achieve a net income of 10% of sales is:

- A. 13,384
- B. 13,445
- C. 13,563
- D. 13,636

20. What is the break-even in units if variable costs are increased by \$1 per unit and the total fixed costs are decreased by \$5,000?

- A. 12,500
- B. 12,700
- C. 12,900
- D. 13,100

21. What type of ratios best measure the short-term ability of the enterprise to pay its maturing obligations and to meet unexpected needs for cash?

- A. Leverage
- B. Solvency
- C. Profitability
- D. Liquidity

Use the following information for questions 22 and 23:

Moon Beam, Inc. has the following income statement (in millions):

MOON BEAM, INC.		
Income Statement		
For the Year Ended December 31,		
	<u>2008</u>	<u>2007</u>
Net Sales	\$180	\$150
Cost of Goods Sold	<u>120</u>	<u>100</u>
Gross Profit	60	50
Operating Expenses	<u>33</u>	<u>60</u>
Net Income	<u><u>\$ 27</u></u>	<u><u>(10)</u></u>

22. Using vertical analysis, what percentage is assigned to Cost of Goods Sold for 2008?

- A. 67%
- B. 33%
- C. 100%
- D. None of the above

23. Using vertical analysis, what percentage is assigned to Net Income for 2008?

- A. 100%
- B. 85%
- C. 15%
- D. None of the above

B. PROBLEM SOLVING

Problem # 1 (8%)

A company wants to evaluate the purchase of a new machine.

- The machine costs \$48,000 plus \$2,000 in shipping and installation charges.
- Purchase of the machine would require an increase in net working capital of \$5,000.
- The company depreciates this asset according to a Modified Acceleration Cost Recovery System (MACRS) depreciation schedule for a five-year asset (Year 1=0.20, Year 2=0.32, Year 3=0.192, Year 4=0.1152, Year 5=0.1152, Year 6=0.0576).
- The company expects that the machine would increase its before-tax revenues by \$30,000 a year, but would also increase operating costs by \$10,000 a year.
- The company expects to sell the machine after 5 years for \$8,000.
- The firm’s tax rate is 40%.

What is the incremental after-tax cash flow at disposal in Year 5?

Problem # 2 (20%)

Safety Corporation’s financial statements appear below:

Safety Corporation Balance Sheet		
December 31, N		
Assets:		
Current Assets		
Cash	\$100,000	
Marketable Securities	200,000	
Inventory	300,000	
Total Current Assets		\$ 600,000
Noncurrent Assets		
Fixed Assets		500,000
Total Assets		\$1,100,000
Liabilities and Stockholders’ Equity:		
Current liabilities		
	\$200,000	
Long-Term liabilities		
	100,000	
Total liabilities		\$ 300,000
Stockholders’ Equity		
Common stock, \$1 par value, 100,000 shares	\$100,000	
Preferred Stock	50,000	
Premium on Common Stock	500,000	
Retained Earnings	150,000	
Total Stockholders’ Equity		800,000
Total Liabilities and Stockholders’ Equity		\$1,100,000

Safety Corporation Income Statement	
For the year Ended December 31, N	
Net Sales	\$10,000,000
Cost of Goods Sold	6,000,000
Gross Profit	\$ 4,000,000
Operating Expenses	1,000,000
Income before Taxes	\$ 3,000,000
Income Taxes (50% rate)	1,500,000
Net Income	\$ 1,500,000

Additional information available is a market price of \$150 per share of common stock and total dividends of \$600,000 for common shareholders for the year ‘N’, and \$250,000 of inventory as of December 31, ‘N – 1’.

Required:

Compute the following ratios:

- (a) Current ratio
- (b) Quick ratio
- (c) Inventory turnover

- (d) Average age of inventory (Days sales in Inventory)
- (e) Debt-equity ratio
- (f) Earnings per share (EPS)
- (g) Common Dividends per share (DPS)
- (h) Common Dividend payout ratio (DPR)

Problem # 3 (8%)

Nader Products is using cost-based pricing to determine the selling price for its new product based on the next information.

Annual volume	25,000 units
Fixed costs	\$700,000 per year
Variable costs	\$200 per unit
Plant investment	\$3,000,000
Working capital	\$1,000,000
Effective tax rate	40%

Required:

Calculate the target price that Nader needs to set for the new product to achieve a 15% after-tax return on investment (ROI)

Problem # 4 (10%)

An enterprise presented at year-end N the following information:

Sales	\$1,200,000
Variable cost per unit	40% of the sale price
Quantity sold	80,000 units
Result – profit	\$2.25 for every unit sold

Required:

1. Calculate the break-even point in quantity and value.
2. Calculate the date of breakeven point assuming that sales are equally distributed over the months of the years.

Problem # 5 (8%)

Suppose Nota Co. can issue stock for \$50 per share, before \$5 from flotation costs. The dividend at the end of the first year is expected to be \$3.50 per share, and future dividends are expected to grow at 5% per year. Calculate the estimated cost of new equity capital.

Good Work!!