

Multiple Choice Questions (45%)**Choose the Correct Answer**

1. The following information was taken from XYZ Company's accounting records for the year ended December 31, 2014:

Increase in raw materials inventory	\$ 15,000
Decrease in finished goods inventory	\$ 35,000
Raw materials purchased	\$ 430,000
Direct manufacturing labor payroll	\$ 200,000
Factory overhead	\$ 300,000
Freight-out	\$ 45,000

There was no work in process inventory at the beginning or end of the year.
XYZ's 2014 cost of goods sold is

- a. \$ 950,000
b. \$ 965,000
c. \$ 975,000
d. \$ 995,000
2. Items I through III are based on the following information pertaining to XYZ Company's manufacturing operations:

<u>Inventories</u>	<u>March 1, 2014</u>	<u>March 31, 2014</u>
Direct materials	\$ 36,000	\$ 30,000
Work in process	\$ 18,000	\$ 12,000
Finished goods	\$ 54,000	\$ 72,000

Additional information for the month of March 2014:

Direct materials purchased	\$ 84,000
Direct manufacturing labor payroll	\$ 60,000
Direct manufacturing labor rate per hour	\$ 7.5
Factory overhead rate per direct labor hour	\$ 10

- I) For the month of March 2014, prime cost was
- a. \$ 90,000
 - b. \$ 120,000
 - c. \$ 144,000
 - d. \$ 150,000
- II) For the month of March 2014, conversion cost was
- a. \$ 90,000
 - b. \$ 140,000
 - c. \$ 144,000
 - d. \$ 170,000
- III) For the month of March 2014, cost of goods manufactured was
- a. \$ 218,000
 - b. \$ 224,000
 - c. \$ 230,000
 - d. \$ 236,000

3. The following information pertains to XYZ Company for the month of April:

	<u>Number of units</u>	<u>Cost of materials</u>
Beginning work in process	15,000	\$ 5,500
Started in April	40,000	\$ 18,000
Units completed	42,500	
Ending work in process	12,500	

All materials are added at the beginning of the process. Using the weighted-average method, the cost per equivalent unit for materials is

- a. \$ 0.59
 - b. \$ 0.55
 - c. \$ 0.45
 - d. \$ 0.43
4. **In an activity-based costing system, what should be used to assign a department's manufacturing overhead costs to products produced in varying lot sizes?**
- a. A single cause and effect relationship
 - b. Multiple cause and effect relationship
 - c. Relative net sales values of the products
 - d. A product's ability to bear cost allocations

5. Which one of the following best describes the capital budget?

- a. It ensures that there are sufficient funds available for the operating needs of the company.
- b. It sets the long-range goals of the company including consideration of all available resources.
- c. It results in the cash requirements during the operating cycle.
- d. It assesses the long-term needs of the company for plant and equipment purchases.

6. XYZ Company operates several retail stores. To support the company’s long-term goals, operating income should be at least 10% of sales. XYZ’s abbreviated proforma income statement for next year is shown below.

Revenues	\$7,500,000
Cost of goods sold	3,750,000
Operating fixed costs	<u>3,125,000</u>
Operating income	<u>\$ 625,000</u>

The best action for XYZ Company to take in order to meet its income goal is to

- a. Increase the advertising budget by \$25,000 which would increase sales units by 5%.
- b. Raise the selling price by 2% which would reduce sales units by 2% but save \$50,000 in operating costs.
- c. Require all managers to reduce their budgeted operating fixed costs by 3%.
- d. Wait until the end of next year’s first quarter to re-evaluate its situation.

7. XYZ Corporation, a retailer, uses flexible budgeting as a planning tool. The company’s original budget for the upcoming year is shown below.

Sales	\$90,000,000
Cost of goods sold	36,000,000
Administrative expenses (all fixed)	21,000,000
Advertising expense	9,000,000
Sales commissions	6,750,000
Other marketing expenses (all fixed)	<u>9,250,000</u>
Operating income	<u>\$ 8,000,000</u>

The manager of XYZ’s Marketing Department believes sales volume will increase by 10% if the advertising budget is increased by \$5,000,000. Should XYZ approve the increased advertising request?

- a. Yes, because the increase in sales is \$4,000,000 greater than the increase in advertising costs.
 - b. No, because advertising is 10% of sales so the maximum increase in sales would be \$900,000.
 - c. Yes, because operating income would increase by \$400,000.
 - d. No, because operating income would decrease by \$275,000.
- 8. One of the final steps in completing a master budget is the preparation of a pro forma cash flow statement. This statement is intended to help users of financial statements**
- a. Evaluate a firm's economic resources and obligations.
 - b. Evaluate a firm's liquidity, solvency, and financial flexibility.
 - c. Determine a firm's components of income from operations.
 - d. Determine whether or not accounts receivable are collectible.
- 9. The cash budget must be prepared before the company can complete the**
- a. Capital expenditure budget.
 - b. Forecasted income statement.
 - c. Production budget.
 - d. Forecasted balance sheet.
- 10. A manager who is accountable for both income statement and balance sheet items is responsible for a(n)**
- a. Cost center.
 - b. Investment center.
 - c. Profit center.
 - d. Revenue center.
- 11. Which one of the following is an advantage of using the budgeting process to judge performance?**
- a. Management is able to measure actual performance against predicted performance.
 - b. Past performance can be used to evaluate performance improvements.
 - c. Management believes that past conditions are an indicator of future conditions.
 - d. Company performance can be measured against the performance of others in the same industry.
- 12. A corporation has a decrease in its operating cycle and a decrease in its cash cycle. All else remaining unchanged, this would occur if the corporation's**
- a. Payables period increased.

- b. Receivables period decreased.
- c. Receivables period increased.
- d. Inventory period increased.

13. A corporation has \$90 million in current assets. If the corporation has a current ratio of 1.2 and a quick ratio of 0.9, what is net working capital?

- a. \$10 million.
- b. \$15 million.
- c. \$81 million.
- d. \$108 million.

14. Which of the following best defines an opportunity cost?

- a. The difference in total costs that results from selecting one alternative instead of another.
- b. The benefit forgone by selecting one alternative instead of another.
- c. A cost that may be saved by not adopting an alternative.
- d. A cost that may be shifted to the future with little or no effect on current operations.

15. Sandra is employed in the production of various electronic products, and she earns \$8 per hour. She is paid time-and-a-half for work in excess of 40 hours per week. During a given week, she worked 45 hours and had no idle time. How much of her week's wages would be charged to manufacturing overhead?

- a. \$60.
- b. \$20.
- c. \$40.
- d. \$ 0.

16. In a job-order costing system, the use of indirect materials would usually be recorded as a debit to which account?

- a. Raw Materials.
- b. Work in Process.
- c. Manufacturing Overhead.
- d. Finished Goods.

17. Expense A is a fixed cost; expense B is a variable cost. During the current year, the activity level has increased but is still within the relevant range. In terms of cost per unit of activity, you would expect which of the following statements to be true?

- a. Expense A has remained unchanged.
- b. Expense B has decreased.

- c. Expense A has decreased.
- d. Expense B has increased.

18. If company A has a higher degree of operating leverage than company B, then which of the following statements is true?

- a. Company A has higher variable expenses.
- b. Company A's profits are more sensitive to percentage changes in sales.
- c. Company A is more profitable.
- d. Company A is less risky.

19. Which of the following costs is often important in decision making, but is omitted from conventional accounting records?

- a. Fixed cost.
- b. Sunk cost.
- c. Opportunity cost.
- d. Indirect cost.

20. What is a cost driver?

- a. It is the largest single category of cost in a company.
- b. It is a fixed cost that cannot be avoided.
- c. It is a factor that causes variations in a cost.
- d. It is an indirect cost that is essential to the business.

21. Which of the following statements is true for a firm that uses variable costing?

- a. The unit product cost changes as a result of changes in the number of units manufactured.
- b. Both variable selling costs and variable production costs are included in the unit product cost.
- c. Operating income moves in the same direction as sales.
- d. Operating income is greatest in periods when production is highest.

22. A company increased the selling price for its product from \$1.00 to \$1.10 a unit when total fixed expenses increased from \$400,000 to \$480,000 and the variable expense per unit remained unchanged. How would these changes affect the break-even point?

- a. The break-even point in units would increase.
- b. The break-even point in units would decrease.

- c. The break-even point in units would remain unchanged.
- d. The effect cannot be determined from the information given.

23. XYZ has \$80 million in current assets, comprised of \$30 million in inventory and \$50 million in cash and marketable securities. The company's current liabilities total \$50 million. If XYZ purchases an additional \$10 million in inventory with \$10 million in cash, the effect of this transaction on the company would be to

- a. Decrease the current ratio and increase the quick ratio.
- b. Decrease the quick ratio while the current ratio remains unchanged.
- c. Leave both the current ratio and the quick ratio unchanged.
- d. Decrease the current ratio and decrease the quick ratio.

24. XYZ is planning to issue additional shares of common stock in a public offering. The current market price of XYZ stock is \$38, and the dividend for the past year was \$2.25. A well-known investment advisory firm forecasts dividend growth of 8%, and an investment banker estimates that the flotation costs would be 6% of the issue price. What cost of equity should XYZ use in its cost of capital calculation?

- a. 13.9%.
- b. 14.0%.
- c. 14.3%.
- d. 14.8%.

25. A stock began the month with a stock price of \$50 per share, paid a dividend of \$2 per share during the month, and ended the month with a price of \$52 per share. What total return did investors earn on the stock during this month?

- a. 0.00 %.
- b. 4.00 %.
- c. 7.69 %.
- d. 8.00 %.

26. XYZ has analyzed a proposed capital investment and calculated an internal rate of return of 16% and a net present value of \$20,000 for the project. If the project has more than one change in the sign of its cash flow (i.e., negative and positive cash flows), which one of the following statements is correct?

- a. The project has another IRR in addition to the 16% rate.
- b. The discount rate used to calculate NPV is greater than 16%.
- c. In the IRR calculation, the project's cash flows are assumed to be reinvested at XYZ's cost of capital.
- d. The project should be rejected, since the cash flows are too volatile.

27. If an investment project has a negative net present value (NPV), which one of the

following statements about the internal rate of return (IRR) of this project must be true?

- a. The IRR is negative.
- b. The IRR is less than the company's weighted average cost of capital.
- c. The IRR is equal to zero.
- d. The IRR is greater than the company's weighted average cost of capital.

28. XYZ issued \$100,000, 15-year term bonds with a coupon rate of 8% at par. Interest is paid annually to bondholders. XYZ's effective income tax rate is 35%. XYZ used the proceeds to complete the purchase of a supplier whose effective income tax rate is 20%. What is the after-tax cost of debt?

- a. 8%.
- b. 6.4%.
- c. 5.2%.
- d. 3.6%.

Exercises (55 %)

I - During March, X Co is preparing the sales budget for the second quarter of the year N based on the following information:

Actual sales in March of the year N	\$350,000
Expected sales growth in April and May	10% (of sales in March)
Expected sales growth in June	20% (of sales in March)

Half of the sales value is collected cash and the other half is collected during the following month.

Actual purchases in March \$200,000

Additional expenses relevant to purchases in March 1%

The expected growth in sales during April, May, and June will be reflected in the same rate on purchases, and additional expected expenses relevant to purchases are also 1% of purchases value. X Co settles quarter of its purchases and other relevant expenses during the month the purchases occur and the rest during the following month.

Additional information:

- X Co is selling a set of old computers during April for \$6,000, half of which will be collected during May and the other half during June.
- X Co will purchase a small transport vehicle during May of year N at \$35,000 cash.
- Other expected expenses during the budget period are shown in the table below (will be paid in cash):

	April	May	June
External Expenses	\$30,000	\$31,000	\$35,000
Personnel Expenses	\$60,000	\$60,000	\$67,000
Taxes and fees			\$3,000

- Personnel wages are not subject to any tax deductions or social expenses.
- Cash balance at 31/3/N is \$85,000.

Required:

For the second quarter of the year N, prepare:

- 1- A simplified sales budget.
- 2- A simplified purchases budget.
- 3- Schedule of expected cash collection.
- 4- Schedule of expected cash payments.
- 5- Cash budget.

II - Farah Company is considering a project that would have an eight-year life and require a \$2,400,000 investment in equipment. At the end of the 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
Variable expenses	<u>\$1,800,000</u>
Contribution margin	\$1,200,000
Fixed expenses:	
Advertising, salaries, and other	
fixed out-of-pocket costs	\$700,000
Depreciation	\$300,000
Total fixed expenses	<u>\$1,000,000</u>
Net operating income	<u>\$ 200,000</u>

Present value of an annuity of \$1 in arrears.

Period	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
8	6.733	6.463	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799	4.639	4.487

The company's discount rate is 12%

Required:

1. Compute the annual net cash inflow from the project.
2. Compute the project's net present value. Is the project acceptable?
3. Find the project's internal rate of return to the nearest whole percent.
4. Compute the project's pay back period.

III - Consider the possible rates of return that you might earn next year on a \$50,000 investment in stock A or on a \$50,000 investment in stock B, depending upon the states of economy: recession, normal, and prosperity.

For stock A:

State of Economy	Return	Probability
Recession	-5%	0.2
Normal	20%	0.6
Prosperity	40%	0.2

For stock B:

State of Economy	Return	Probability
Recession	10%	0.2
Normal	15%	0.6
Prosperity	20%	0.2

Required:

- a. Calculate the expected rate of return for each stock and the standard deviation for each stock.
- b. Calculate the coefficient of variation for each stock.
- c. Which stock is less risky? Justify your answer.

 IV - Management at BETA expects operating income of \$220,000 for the month of March, based on the following sales mix and variable expenses:

	L	XL	XXL
Sales	\$500,000	\$300,000	\$900,000
Variable Expenses	\$300,000	\$210,000	\$720,000
Contribution Margin	\$200,000	\$90,000	\$180,000

Mr BETA has asked that you provide the following:

- a) The break-even sales dollars for BETA Corp.
- b) The margin of safety.
- c) The degree of operating leverage.
- d) The total sales dollars required to double the firm operating income.

NOTE: Carry any calculations out to three decimal places (i.e. 0.000).