1
Shareholders' equity is best defined as:
A) the total market value of a firm's assets.
B) the summation of the net profits retained by a firm from its inception.
C) a residual claim on the value of a firm's assets after the firm's debts have been paid.
D) the total amount received by a firm from the sale of equity securities.
E) the distribution of a firm's profits to its shareholders.

## 2

Finance includes decisions related to a firm's:
A) net working capital, such as determining the appropriate amount of long-term debt to be acquired to finance a new capital project.
B) capital budgeting, such as determining the optimal level of inventory.
C) capital structure, such as determining the extent to which debt should be used to finance the firm's operations.
D) capital expenditures, such as deciding when a supplier should be paid.
E) net working capital, such as determining the amount to be distributed as a dividend.

## 3

The ideal capital structure for a firm is the mixture of debt and equity that:
A) equates the level of debt to the level of equity.
B) minimizes the long-term debt.
C) minimizes the annual interest expense.
D) maximizes both the level of debt and the level of equity.
E) maximizes the value of the firm.

4
Which one of the following functions should be assigned to the controller, rather than the treasurer?
A) cash management
B) financial planning
C) capital expenditure
D) tax planning
E) credit management

## 5

Which one of the following best describes the top priority for a financial manager?
A) maximize the current accounting profits by utilizing the most favorable accounting methods
B) minimize the level of inventory held by the firm
C) reduce the net working capital of the firm
D) create value from a firm's activities by generating greater cash inflows than cash outflows
E) minimizing the total amount of taxes which the firm must Pay

## 6

The treasurer and controller generally report to the:
A) president.
B) chief executive officer (CEO).
C) board of directors.
D) chief financial officer (CFO).
E) chief operations officer (COO).

7 The allocation of manufacturing costs to various units of production is a function which is assigned to the:
A) treasurer.
B) corporate director.
C) controller.
D) chairman of the board.
E) vice president of operations.

## 8

Capital budgeting is the process of:
A) determining how to raise the money required to fund a project.
B) choosing how much cash to keep on hand.
C) deciding the amount of earnings that should be distributed to shareholders.
D) managing a firm's long-term assets.
E) deciding which marketable securities to purchase.

9
Most investors prefer cash $\qquad$ and have $a(n)$ $\qquad$ risk.
A) sooner rather than later; preference for
B) sooner rather than later; aversion to
C) sooner rather than later; neutral stance towards
D) later rather than sooner; preference for
E) later rather than sooner; aversion to

## 10

The cash flows from a firm can be distributed to:
I. shareholders.
II. debtholders.
III. the government.
IV. the firm itself.
A) I only
B) I and II only
C) I and III only
D) I, III, and IV only
E) I, II, III, and IV

11
Which one of the following is a current liability?
A) account receivable
B) mortgage payable over thirty years
C) account payable
D) inventory
E) retained earnings

12
Which of the following are components of stockholders' equity?
I. common stock
II. capital surplus
III. long-term debt
IV. retained earnings
A) I and IV only
B) I and II only
C) II and III only
D) II and IV only
E) I, II, and IV only

13
An asset which $\qquad$ is defined as a liquid asset.
A) cost less than its current value
B) declines in value each year
C) is used to manufacture a product
D) has a physical presence
E) is readily and easily converted to cash

## 14

DJ Companies sold $\$ 20,000$ in stock and issued $\$ 15,000$ in debt this past year. The firm also repaid $\$ 18,000$ on its loans and paid $\$ 3,200$ in interest. During the year, DJ Companies paid quarterly dividends which totaled to $\$ 8,000$ for the year and earned a net income of $\$ 22,300$. The beginning balances at the start of the year were:
Preferred stock - $\$ 10,000$
Treasury stock - \$5,000
Long-term debt - \$41,000
Accumulated retained earnings - $\$ 78,600$
Capital surplus - $\$ 22,300$
Common stock - \$50,000
What is the book value of stockholders' equity at the end of the year?
A) $\$ 177,900$
B) $\$ 187,900$
C) $\$ 185,200$
D) $\$ 190,200$
E) $\$ 200,200$

## 15

The financial records of Taylor and Daughter, show current assets of $\$ 850$ and net fixed assets of $\$ 2,450$. The firm has $\$ 700$ in liabilities, which is the amount the firm would need to pay today to extinguish its debt. The firm estimates that it could sell its current assets for $\$ 800$ and its fixed assets for $\$ 1,990$. What is the market value of the stockholders' equity?
A) $\$ 250$
B) $\$ 800$
C) $\$ 1,200$
D) $\$ 2,090$
E) $\$ 2,600$

## 16

A firm's balance sheet shows current assets of $\$ 410$, net fixed assets of $\$ 685$, long-term debt of $\$ 320$, and owners' equity of $\$ 590$. What is the value of the firm's current liabilities?
A) $\$ 35$
B) $\$ 165$
C) $\$ 185$
D) $\$ 225$
E) $\$ 825$

## 17

The balance sheet of the Wilson's Market shows current assets of $\$ 38,700$. These assets could probably be sold today for $\$ 35,000$ cash. The firm owes $\$ 32,600$ to its short-term creditors and $\$ 52,000$ to its long-term creditors. The equipment of the firm has a book value of $\$ 74,800$ and a market value of $\$ 78,900$. What is the book value of the stockholders' equity?
A) $\$ 400$
B) $\$ 600$
C) $\$ 1,300$
D) $\$ 28,900$
E) $\$ 29,300$

## 18

Which one of the following is a long-term liability?
A) deferred taxes
B) accounts payable
C) capital surplus
D) notes payable
E) treasury stock

## 19

A firm has cash of $\$ 15$, accounts payable of $\$ 18$, inventory of $\$ 102$, net fixed assets of $\$ 147$, accounts receivable of $\$ 31$, and stockholder's equity of $\$ 87$. The current assets equal $\qquad$ and the long-term debt is:
A) $\$ 148 ; \$ 187$.
B) $\$ 148 ; \$ 190$.
C) $\$ 148 ; \$ 208$.
D) $\$ 295 ; \$ 190$.
E) $\$ 295 ; \$ 208$.

20
An accrued expense is classified as:
A) a current asset.
B) a fixed asset.
C) a current liability.
D) a long-term liability.
E) stockholders' equity.

## 21

A common-size income statement expresses all accounts as a percentage of:
A) sales.
B) EBIT.
C) EBIT plus depreciation.
D) taxable income.
E) net income.

22
Common-size statements are designed to primarily address the problems encountered when comparing firms of varying:
A) sizes.
B) industries.
C) geographic locations.
D) accounting standards.
E) management structures.

## 23

A common-size balance sheet expresses accounts as a percentage of:
A) current assets.
B) fixed assets.
C) total assets.
D) total liabilities.
E) total equity.

## 24

Iowa Farm Machine Sales has current assets of $\$ 368,450$, net fixed assets of $\$ 1.23$ million, and total liabilities of $\$ 674,230$. On a common-size balance sheet, current assets will be expressed as $\qquad$ percent.
A) 23.1
B) 0
C) 3
D) 8
E) 9

25
The net income as shown on the common-size income statement for the past three years for Connor and Company is 6.3 percent, 6.9 percent, and 7.1 percent, respectively. This indicates that the firm is:
A) increasing in size.
B) improving its profit per sales dollar.
C) increasing its total profits.
D) increasing its profits at the same rate as its sales growth.
E) paying less in taxes.

## 26

Avalon Manufacturing has a cost of goods sold of $\$ 680,130$ and a net income of $\$ 41,409$ on total sales of $\$ 1,211,407$. Total assets are $\$ 981,500$. A common-size income statement will show cost of goods sold of $\qquad$ percent and a net profit of $\qquad$ percent.
A) $56.1 ; 3.4$
B) $1 ; 3.9$
C) $1 ; 4.2$
D) $3 ; 3.9$
E) $31 ; 4.2$

## 27

Which one of the following statements concerning the current ratio is correct?
A) Using book values to compute the current ratio is unacceptable because the market values of the current assets tend to deviate significantly from the book values.
B) The current ratio is computed by dividing current liabilities by current assets.
C) The current ratio will always be greater than the quick ratio in companies that carry inventory.
D) The current ratio measures the long-run liquidity position of a firm.
E) The higher the current ratio, the more cash a firm has on hand.

28
The $\qquad$ is a liquidity ratio.
A) return on assets
B) total asset turnover
C) cash ratio
D) times interest earned ratio
E) profit margin

## 29

$\qquad$ ratios are designed to determine a firm's long-run ability to
meet its obligations.
A) Liquidity
B) Asset turnover
C) Profitability
D) Financial leverage
E) Market value

30
The total asset turnover ratio measures the:
A) ability of the combined assets of a firm to generate sales.
B) length of time it takes a firm to completely replace its fixed assets.
C) amount of net income a firm generates per dollar of total assets.
D) operating income per dollar of assets owned by a firm.
E) amount of sales each dollar of fixed assets generates.

## 31

You are planning to move next year. You recently told your best friend that you have decided to sell all of your current furniture just prior to moving as you do not want to pay to transport it across the country. Your friend offered to pay you $\$ 2,000$ next year for this furniture. What is your friend's offer worth today if you can earn 6 percent on your money?
A) $\$ 1,779.99$
B) $\$ 1,818.22$
C) $\$ 1,886.79$
D) $\$ 2,000.00$
E) $\$ 2,120.00$

## 32

All else constant, the present value $\qquad$ when the discount rate increases.
A) increases
B) decreases
C) remains constant
D) can either increase or decrease
E) can either remain constant or decrease

## 33

Terry is considering purchasing a used tractor and restoring it. He estimates that his total restoration cost including his labor, in today's dollars, will be $\$ 21,400$. He also estimates that he can resell the tractor 1 year from now at a price of $\$ 24,000$. Should Terry undertake this project if he requires a 9.5 percent rate of return? Why or why not?
A) Yes; because the price of $\$ 24,000$ provides a return in excess of 9.5 percent
B) Yes; because the selling price is greater than the cost
C) No; because the present value of the sales price is less than $\$ 21,400$
D) No; because the net present value is $-\$ 102.16$
E) No; because the net present value is $\$ 517.81$

## 34

Paul is considering a business investment which is guaranteed to pay $\$ 4,000$ one year from today. What is the maximum amount Paul should pay today for this investment if he wants to earn a 9.75 percent rate of return?
A) $\$ 3,411.68$
B) $\$ 3,644.65$
C) $\$ 3,661.67$
D) $\$ 3,689.02$
E) $\$ 3,701.08$

## 35

Ann is considering buying an office building at a cost of $\$ 199,900$. She estimates that she can resell the building after one year at a price of $\$ 229,500$. What discount rate approximately equates those two prices?
A) 83 percent
B) 60 percent
C) 14.81 percent
D) 10 percent
E) 33 percent

36
The Corner Art Store owns a painting which they display in their showroom. The painting is currently valued at $\$ 1,350$ but is currently not for sale. The value of the painting is increasing by 7.4 percent
annually. Which one of the following prices best represents the value of the painting next year should the store decide to sell it at that time?
A) $\$ 1,350$
B) $\$ 1,400$
C) $\$ 1,450$
D) $\$ 1,500$
E) $\$ 1,550$

## 37

On your 5th birthday, your grandparents opened an investment account in your name and made an initial deposit of $\$ 2,500$. The account pays 4.5 percent interest. How much will you have in the account on your 21st birthday if you don't add or withdraw any money before then?
A) $\$ 4,711.68$
B) $\$ 5,002.10$
C) $\$ 5,055.93$
D) $\$ 5,207.19$
E) $\$ 5,211.14$

38
Today, you are investing $\$ 27,500$ infs a new project. The project will return $\$ 8,000, \$ 9,500$, and $\$ 11,000$ at the end of each of the next three years, respectively. What is the net present value of this project at a 9 percent discount rate?
A) $-\$ 3,670.57$
B) $-\$ 3,209.11$
C) $\$ 3,711.09$
D) $\$ 3,787.88$
E) $\$ 3,901.11$

## 39

Your goal is to have $\$ 15,000$ in your savings account 3 years from now so that you can purchase a home. Which one of the following statements is correct given this situation? Assume that you only make one initial deposit into the savings account.
A) The higher the interest rate on your savings, the larger the amount that you need to deposit today to fund this account.
B) If you deposit $\$ 7,500$ today and earn 7 percent interest, you will reach your goal in 3 years.
C) If you have $\$ 10,000$ to deposit today, you will need to earn at least 15 percent interest to reach your goal.
D) The less money you have to deposit today into the account, the greater the interest rate must be if you are to reach your goal of $\$ 15,000$.
E) You will have to deposit $\$ 12,460$ today if the interest you can earn is 4.7 percent.

40
What is the future value of $\$ 12,000$ received today if it is invested at 10.5 percent compounded annually for 25 years?
A) $\$ 131,484.77$
B) $\$ 145,625.76$
C) $\$ 147,475.83$
D) $\$ 152,521.75$
E) $\$ 153,374.89$

41
What is the value of a $\$ 50,000$ pure discount bond that matures in 15 years when the market interest rate is 6.5 percent?
A) $\$ 18,877.60$
B) $\$ 19,441.33$
C) $\$ 19,589.43$
D) $\$ 19,600.00$
E) $\$ 20,333.33$

42
Which one of the following statements is true?
A) A pure discount bond is also called a zero coupon bond.
B) A two-year, $\$ 1,000$ pure discount bond is worth less than a 5 -year, $\$ 1,000$ pure discount bond given a 5 percent market interest rate.
C) The price of a zero coupon bond is unaffected by the time to maturity.
D) A pure discount bond pays interest payments every 6 months.
E) The price of a bond is directly related to the market rate of interest.

43
Generally speaking, U.S. government coupon bonds pay interest every $\qquad$ months while U.S. corporate bonds pay interest every $\qquad$ months.
A) $3 ; 3$
B) $3 ; 6$
C) $6 ; 3$
D) $6 ; 6$
E) $6 ; 12$

44
What is the amount of each interest payment on an 8.5 percent, semiannual coupon bond if the face value of the bond is $\$ 1,000$ ?
A) $\$ 4.25$
B) $\$ 8.50$
C) $\$ 21.25$
D) $\$ 42.50$
E) $\$ 85.00$

## 45

A 7 percent, semiannual coupon bond has a $\$ 1,000$ face value and matures in 11 years. What is the current value of this bond if the market rate of interest is 9.8 percent?
A) $\$ 814.03$
B) $\$ 887.16$
C) $\$ 892.04$
D) $\$ 911.11$
E) $\$ 928.82$

46
Miller Brothers has bonds outstanding that mature in 14 years and pay a 6 percent semiannual coupon. What will the bond quote be for one of these bonds if the par value is $\$ 1,000$ and market interest rate is 8.2 percent?
A) 78
B) 81.88
C) 67
D) 80
E) 23

47
A semiannual coupon bond pays interest payments of $\$ 42.50$ each. What is the coupon rate if the face value of the bond is $\$ 1,000$ ?
A) 13 percent
B) 25 percent
C) 8.50 percent
D) 75 percent
E) 00 percent

## 48

Which one of the following bonds by definition has no maturity date?
A) zero coupon
B) U.S. government
C) consol
D) coupon
E) par value

49 The value of a pure discount bond will $\qquad$ when the market rate of interest increases, all else constant.
A) be unaffected
B) increase
C) decrease
D) either be unaffected or increase, depending on the time to maturity
E) either be unaffected or decrease, depending on the time to Maturity

## 50

Which one of the following statements is true?
A) The coupon rate of a discount bond exceeds the bond's YTM. If the YTM is equal to the coupon rate, the bond will sell at
B) a discount.
C) A premium bond has a YTM that exceeds the coupon rate.
D) A par value bond has a YTM that is less than the coupon rate.
E) A premium bond has a YTM that is less than the coupon rate.

## 51

The dollar value a project adds to a firm can be computed using which one of the following analytical methods?
A) payback
B) profitability index
C) net present value
D) internal rate of return
E) average accounting return

## 52

Eastern Express is considering a project with an initial investment of $\$ 218,400$. Clyde, the general manager, estimates the project will generate additional revenues of \$76,200 a year for the next 4 years. How much value will this project add to the firm if the required rate of return is 15.4 percent?
A) $-\$ 2,599.18$
B) $\$ 1,406.19$
C) $\$ 9,008.74$
D) $\$ 23,406.08$
E) $\$ 38,117.13$

## 53

You need to borrow $\$ 2,500$ quickly and Slimey Joe, the neighborhood loan shark, will give it to you if you promise to repay him $\$ 300$ a month for the next year. Suppose that Joe's cost of funds is 2 percent per month. From Joe's point of view, what is the net present value of this deal?
A) $\$ 429.18$
B) $\$ 487.08$
C) $\$ 542.16$
D) $\$ 672.60$
E) $\$ 708.34$

54
What is the net present value of the following set of cash flows if the required return is 12.3 percent?
Yro $=-\$ 244,900 ;$ Yr1 $=\$ 16,300 ;$ Yr2 $=\$ 102,900 ;$ Yr3 $=\$ 141,700 ;$ and $Y r 4=\$ 137,500$
A) $-\$ 21,407.18$
B) $-\$ 2,619.03$
C) $\$ 22,407.01$
D) $\$ 37,715.07$
E) $\$ 54,116.23$

## 55

California Squeaker is considering creating a new website at a cost of $\$ 526,000$. The website will provide the latest news and gossip from around the state for an annual fee per subscriber of $\$ 8.95$ a year. The company expects to collect fees totaling $\$ 44,750$ in year $1, \$ 89,500$ in year 2 , and $\$ 304,300$ per year for years 3 through 5 . After year 5, the company believes the website will be worthless due to technological advancements. What is the potential value to the firm from this project given a 16 percent discount rate?
A) $\$ 62,406.91$
B) $\$ 86,986.17$
C) $\$ 102,008.49$
D) $\$ 121,603.13$
E) $\$ 146,900.03$

## 56

Would you accept a project which is expected to pay $\$ 8,600$ a year for 7 years if the initial investment is $\$ 39,800$ and your required return is 13.65 percent? Why or why not?
A) no; The NPV is $-\$ 2,523$.
B) no; The NPV is - $\$ 989$.
C) no; The NPV is - $\$ 413$.
D) yes; The NPV is $\$ 3,011$.
E) yes; The NPV is $\$ 3,336$.

## 57

Which of the following are strengths of the NPV method of analysis?
I. the consideration of every cash flow related to a project
II. the analysis is based on cash flows
III. the profits and losses expected over the life of a project are considered
IV. time value of money is considered
A) I and II only
B) II and IV only
C) I, III, and IV only
D) II, III, and IV only
E) I, II, and IV only

## 58

Which of the following statements are correct?
I. The NPV of a project will increase if the required discount rate is decreased.
II. A financial manager acts in the shareholders' best interests by identifying and implementing positive NPV projects.
III. The discount rate used in the NPV computation is the opportunity cost of the project.
IV. A project with an NPV equal to zero is earning a return exactly equal to its required return.
A) I and II only
B) II and III only
C) II, III, and IV only
D) I, II, and IV only
E) I, II, III, and IV

## 59

You are considering a project that costs $\$ 156,700$ and has expected cash flows of $\$ 31,000, \$ 58,300$, and $\$ 113,600$ per year over the next three years, respectively. What is the net present value of the project if the appropriate discount rate is 14.7 percent?
A) $-\$ 10,077.43$
B) $-\$ 7,251.43$
C) $\$ 4,616.08$
D) $\$ 13,909.18$
E) $\$ 14,141.41$

## 60

Net present value:
A) is equal to the initial investment in a project.
B) is a dollar comparison of a project's cost to the present value of the project's benefits.
C) is equal to zero when the discount rate applied is less than the internal rate of return (IRR).
D) is simplified by the fact that the discount rate applicable to an individual project is easy to determine.
E) requires a firm to set an arbitrary cutoff point in time for determining whether or not a project should be accepted.

## 61

The manager of Home Food Sales is trying to decide whether or not the firm should repair one of its delivery trucks. The chief mechanic has stated that "It would be a waste of money not to repair it because we just spent $\$ 2,200$ on repairs last month." What is the major problem with this argument?
A) It ignores the opportunity cost of the money that has been spent.
B) It includes sunk costs in the decision.
C) It includes opportunity costs in the decision.
D) It includes changes in net working capital.
E) It includes financing costs in the decision.

## 62

It is important to identify and use only incremental cash flows in capital investment decisions:
A) because they are simple to identify.
B) only when allocated costs are present.
C) because ultimately it is the change in a firm's overall future cash flows that matter.
D) in order to accommodate unforeseen changes that might occur.
E) whenever sunk costs are involved.

## 63

Incremental cash flows should include the:
I. sunk costs.
II. opportunity costs.
III. erosion effects.
IV. effects of synergy.
A) I and II only
B) I, III, and IV only
C) II and III only
D) II, III, and IV only
E) I, II, III, and IV

## 64

Boyd and Sons purchased 14.5 acres of industrial property 2 years ago at a cost of $\$ 1.1$ million. Since that time, the firm has spent $\$ 220,000$ on land improvements such that the current market value of the land is estimated at $\$ 1.45$ million. The operations manager has been assigned the task of analyzing the construction of a new manufacturing plant located on that site. This manager
has developed cost estimates for the building and its contents of $\$ 24.6$ million along with $\$ 1.1$ million for additional land improvements and site preparation. Based on this information, the financial manager should estimate the initial cash flow for the plant project as $\qquad$ million.
A) $\$ 25.70$
B) $\$ 25.92$
C) $\$ 26.05$
D) $\$ 27.02$
E) $\$ 27.15$

## 65

A.B. Cooper purchased a piece of land 3 years ago for $\$ 124,000$ and subsequently added $\$ 68,000$ in improvements. There are two options for future use of the land: 1) the land can be sold today for $\$ 213,000$ aftertax; or 2 ) your company can destroy the past improvements and build a factory on the land. When evaluating the factory option, what amount, if any, should be included for the use of the land?
A) $\$ 0$
B) $\$ 124,000$
C) $\$ 145,000$
D) $\$ 192,000$
E) $\$ 213,000$

## 66

Which one of the following is least likely to cause erosion?
A) A gas station owner expands his building to make room for a convenience store.
B) You begin selling coffee in single-serving foil pouches along side your regular-sized cans.
C) You build a Taco Heaven just down the street from the Chili Dog Haven you own.
D) Your grocery store begins to carry additional flavors of ice cream.
E) The concession stand at the local ball field begins to sell both hot dogs and hamburgers, rather than just hot dogs.

## 67

Over the past five years, your company scientists spent $\$ 3.6$ million developing a new engine additive which they recently began marketing. Today, those same scientists have proven that the additive can also be used as a cleaning fluid if additional chemicals are added to the mixture. As the financial manager of the firm, you are being assigned the task of determining whether or not the cleaning fluid should be produced and sold. For your analysis, the original $\$ 3.6$ million R\&D costs should be treated as:
A) a cash outflow at time $T=-5$.
B) an annual operating cost of $\$ .72$ million for each of the next 5 years.
C) an annual cash outflow of $\$ .72$ million for each of the past 5 years.
D) an opportunity cost and included as a cash outflow at time $\mathrm{T}=0$.
E) a sunk cost, and therefore excluded from the analysis.

## 68

Your company currently manufactures the "Priced Right" line of golf clubs. The board of directors wants you to look at replacing that line with a new "Straight Hit" line of clubs. Which one of the following should NOT be included in your analysis of the proposed "Straight Hit" project?
A) $\$ 400,000$ drop in sales from terminating the "Priced Right" line of clubs
B) $\$ 150,000$ market value of land currently owned by the firm that will be used for the project
C) $\$ 200,000$ already spent on research and development to create the new line of clubs
D) $\$ 350,000$ you will pay to Fred Frimstone to promote your new clubs
E) $\$ 125,000$ you expect to receive from selling the equipment used to produce the "Priced Right" clubs

## 69

Brett is deciding whether or not to drop one of the college courses in which he is currently enrolled. If he drops the course, he will forfeit half of the money spent on tuition. However, by dropping the course, he can increase the number of hours he works each week. Which of the following statements is accurate based on Brett's situation?
I. Remaining in the class incurs an opportunity cost equal to Brett's foregone wages.
II. The tuition is irrelevant to the decision because it is a sunk cost.
III. The time and energy put into the course thus far is a sunk cost.
A) I only
B) I and II only
C) I and III only
D) II and III only
E) I, II, and III

70
When evaluating a capital budgeting project, you ignore all cash flows of the firm except those that change when a project is implemented. The cash flows you are trying to isolate are referred
to as:
A) capital expenditures.
B) operating cash flows.
C) incremental cash flows.
D) allocated costs.
E) opportunity costs.

71
After five years as the head auto mechanic in a local garage, Pete decides he is tired of working for others, especially since business is typically slow and he works partially on commission. Thus, he decides to open his own garage. After estimating the cash flows for his new garage, he determines that having his own garage should generate a large positive net present value. Which of the following is most likely true about his analysis?
A) The discount rate he used must be too high.
B) Unless he can find a true source of value in his new venture, he probably made a mistake in estimating his cash flows.
C) He has likely been overly optimistic about the future and has underestimated future cash flows.
D) His estimates of initial cash outlays have to be understated.
E) His analysis is probably correct provided there is major competition in the auto repair business.

## 72

Which one of the following statements regarding net present value (NPV) analysis is correct?
A) The value of NPV analysis depends on the accuracy of the cash flow projections.
B) A manager who uses NPV analysis has nothing to gain by conducting sensitivity analysis.
C) Negative NPV projects should always be rejected without further scrutiny.
D) A manager who uses NPV analysis is apt to also use sensitivity analysis, but not scenario analysis.
E) NPV calculations are fairly reliable even when an inappropriate discount rate is used.

## 73

Which one of the following generally has the least forecasting risk?
A) sales
B) initial investment
C) fixed costs
D) selling price per unit
E) variable costs

## 74

DeWright is an inventor and a sole proprietor. He recently developed a new glue for plastic models which he believes is stronger and more environmentally friendly than existing glues. This morning,

DeWright completed an NPV analysis on the production and marketing of this glue for the next three years. He believes that three years is the extent of the project life as he is quite confident that he will be able to develop an even better glue within that time period. The NPV he computed is positive but he questions the reliability of his projected sales quantity. Which one of the following would be the best method for DeWright to use to test the impact of the sales quantity on the NPV of the project?
A) sensitivity analysis
B) IRR analysis
C) payback analysis
D) scenario analysis
E) discounted payback analysis

75
The situation that is most likely to exist if a project is accepted is known as the $\qquad$ scenario.
A) pessimistic
B) optimistic
C) expected
D) realistic
E) actual

## 76

The purpose of scenario analysis is best described as the:
A) evaluation of all possible cash flow forecasts.
B) evaluation of all possible contingencies.
C) close analysis of highly negative net present value projects.
D) development of a range of potential outcomes from a particular project.
E) gauge of the profitability of a project once that project has commenced.

## 77

Which one of the following statements is true concerning scenario analysis?
A) A positive net present value given a project's pessimistic scenario guarantees you a positive return from the project.
B) The optimistic scenario is the most positive outcome that can be achieved.
C) If the net present value of the expected scenario is negative then it is totally unnecessary to analyze the optimistic and the pessimistic scenarios.
D) Scenario analysis is less apt than sensitivity analysis to determine which single variable has the greatest impact on the net present value.
E) Scenario analysis is rarely used in the business world.

78
The process of identifying the variable within a project that has the most forecasting risk is known as:
A) scenario analysis.
B) sensitivity analysis.
C) contingency planning.
D) break-even analysis.
E) discretionary analysis.

## 79

$\qquad$ analysis investigates the impact on net present value of allowing one variable to change while holding all other variables constant.
A) Scenario
B) Break-even
C) Strategic options
D) Simulation
E) Sensitivity

A financial manager reviewing a project is concerned about the level of forecasting risk in the project's forecasted cash flows. The manager should use $\qquad$ analysis to identify the variable that presents the highest degree of forecasting risk.
A) scenario
B) simulation
C) sensitivity
D) break-even
E) strategic options

## 81

The measure of the squared deviations of a security's returns from its expected return is called the:
A) mean.
B) correlation coefficient.
C) standard deviation.
D) covariance.
E) variance.

## 82

Which of the following relate the performance of one to security to that of another security?
I. correlation
II. variance
III. covariance
IV. standard deviation
A) I only
B) I and IV only
C) II and III only
D) I and III only
E) II, III, and IV only

83
A stock has the following expected rates of return. Each state of the economy is equally likely to occur. What is the variance of these returns?
Economic state
Boom
Expected return
. 17
Normal
.12
Recession
-. 02
A) .004802
B) .005138
C) .006467
D) .007410
E) .009700

## 84

The common stock of Olsen Shipping has an expected rate of return of 15.42 percent and a variance of . 007248 . What is the standard deviation of the returns on this stock?
A) 91 percent
B) 8.51 percent
C) 08 percent
D) 13 percent
E) 47 percent

## 85

Which one of the following statements is correct?
A) The variance is easier to understand than the standard deviation.
B) When comparing securities, low-variance securities are high-standard deviation securities.
C) A negative variance security has less volatility that a positive variance security.
D) The correlation is the square root of the covariance.
E) The correlation coefficient must be greater than or equal to -1 and equal to or less than +1 .

## 86

Parker Sisters stock has an expected return of 12.8 percent with a standard deviation of 7.6 percent. Lowry Brothers stock has an expected return of 16.3 percent and a standard deviation of 13.9 percent. The covariance of the returns on these two stocks is 0.001842 . What is the correlation coefficient?
A) .083409
B) .088286
C) .163667
D) .174366
E) .182121

87
Two stocks have the following expected returns given various states of the economy. Each state of the economy has an equal chance of occurrence. What is the covariance of the returns on these two stocks?

Economic State Boom Normal Recession

Expected
Return on A
.147
.114
.021

Expected
Return on B
.098
. 101
.149
A) -.001221
B) -.001327
C) -.001384
D) -.001942
E) -.001973

## 88

The investment manager of Babson Securities is studying the relationship of stock $A$ to stock $B$. Given the various states of the economy, the expected returns for each stock are shown below. Each state of the economy has an equal chance of occurring. What is the covariance of the returns on these two stocks?

| $\begin{array}{c}\text { Economic } \\ \text { State }\end{array}$ |
| :--- |
| Boom |
| Normal |
| Recession |
| Depression |

## Expected Return on A <br> .143 <br> . 085 <br> -. 034 <br> -. 092

Expected
Return on B
.160
.132
-. 065
-. 240
A) .008023
B) .011419
C) .014680
D) .016071
E) 017414

## 89

Currently, Sand Stone Gems has a return of 15.6 percent for the year and has an average return for the past ten years of 12.1 percent. Meanwhile, Deep Creek Mines has a return of 6.7 percent
for the year and an average return for the past ten years of 9.1 percent. Given this, you can assume that the:
A) standard deviation of the returns on Sand Stone Gems is negative.
B) standard deviation of the returns on Deep Creek Mines is negative.
C) covariance of the returns on these two stocks is negative.
D) covariance of the returns on these two stocks is zero.
E) correlation of the returns on these two stocks is zero.

90
If the rates of return on two stocks are unrelated, the covariance of the two stocks should be:
A) -100 .
B) -1 .
C) 0 .
D) 1 .
E) 100 .

91
Which one of the following statements is correct?
A) The total return on an investment is based solely on the return investors' expect to earn.
B) If an announcement is expected, the news contained in that announcement never affects the price of the stock to which it refers.
C) The market discounts information as soon as that information is expected.
D) Only news specifically about $A B C$ stock will affect the price of $A B C$ stock.
E) Whenever a firm announces quarterly earnings that reflect an increase from a prior period, the stock of that firm will increase in value.

## 92

Which one of the following is most apt to cause the price of Toyland stock to decrease significantly?
A) a speech by the Federal Reserve Chairman wherein he states that holiday sales for the retail sector are running as predicted
B) an announcement by Toyland's CFO that the dividend this quarter will match expectations and increase by two percent over last quarter's dividend
C) a surprise announcement that the CFO of Toyland, who was disliked by Wall Street, has resigned
D) a written report by a respected Wall Street analyst that the growth rate of Toyland's sales is slowing more than anticipated previously
E) a news announcement that consumers' income rose sharply in the last quarter

## 93

Which two of the following are most apt to be included in the expected part of a stock's return?
I. the seasonal effect of a company's sales
II. a fire at a firm's distribution center
III. the discovery of gold in a playground
IV. the passage of a new trade law increasing taxes on imported goods
A) I and II
B) III and IV
C) I and IV
D) II and III

## E) I and III

94
Which one of the following is the most essential if the actual return of a security is going to equal the security's expected return?
A) an unexpected return of zero
B) the lack of any news announcements concerning the company which issued the security
C) an inflation beta of zero
D) any news announcement related to the security's issuer must be unexpected
E) an expected return equal to the expected market return

## 95

Risk can be defined as:
I. the actual return minus the expected return.
II. the surprise portion of an announcement.
III. both systematic and unsystematic.
IV. the discounted portion of an announcement.
A) I and IV only
B) II and III only
C) I, II, and III only
D) II, III, and IV only
E) I, II, III, and IV

## 96

The risk of an investment is most related to the:
A) total return.
B) return anticipated by investors.
C) expected return.
D) surprise portion of an event.
E) announcement of the long-anticipated retirement of an executive.

## 97

Which of the following terms refer to the same type of risk?
I. systematic
II. specific
III. idiosyncratic
IV. unsystematic
A) I and II only
B) III and IV only
C) I and III only
D) I, II, and III only
E) II, III, and IV only

## 98

Which one of the following would generally be considered systematic risk?
A) an increase in employment by toy manufacturers
B) a decrease in the growth rate of the GDP
C) the loss of a key company executive
D) an increase in the price of a pain medication
E) a concession by a teacher's union

## 99

Which one of the following is an example of unsystematic risk?
A) an increase in inflation
B) a reduction in the value of the dollar as compared to other key currencies
C) a decrease in interest rates by the Federal Reserve
D) a shortage of oil
E) a labor strike against a plastics firm

100
Which one of the following defines unsystematic risk?
A) $\bar{A}+\varepsilon$
B) $\varepsilon+R$
C) $m+\varepsilon$
D) $U+m+\varepsilon$
E) $\varepsilon-r$

101
The appropriate discount rate to be used when analyzing an investment project is the:
A) rate of return that will result in an NPV of zero.
B) firm's current cost of capital.
C) project's internal rate of return.
D) rate of return financial markets offer on investments of similar risk.
E) rate of interest the firm receives on its excess cash investments.

102
The cost of equity capital for an all-equity firm:
I. depends on the use of the funds, not the source.
II. can be applied only to company project's whose risk level is comparable to that of the existing firm. III. will vary directly with the risk-free rate of return assuming that the market risk premium is constant.
IV. is dependent upon both the firm's beta and the market risk premium.
A) I, II, and III only
B) I, II, and IV only
C) II, III, and IV only
D) I, III, and IV only
E) I, II, III, and IV

103
The common stock of The Holiday Express sells for $\$ 46.50$. The firm's beta is 1.6 , the risk-free rate is 3.8 percent, and the market risk premium is 8.2 percent. What is the cost of equity for The Holiday Express?
A) 84 percent
B) 49 percent
C) 16.92 percent
D) 37 percent
E) 11 percent

104
Which one of the following formulas correctly describes the cost of equity capital?
A) $R S=R M-\beta \times(R F-R M)$
B) $R s=R M+\beta \times(R F-R M)$
C) $R S=R F-\beta \times(R M-R F)$
D) $R s=R F+\beta \times(R F-R M)$
E) $R S=R F+\beta \times(R M-R F)$

105
All else constant, which of the following will always decrease a firm's cost of equity as computed using the Capital Asset Pricing Model? Assume beta is positive.
I. a decrease in the risk-free rate of return
II. a decrease in a firm's level of systematic risk
III. a decrease in the market risk premium
IV. a decrease in the market rate of return
A) I and IV only
B) II and III only
C) I, II, and III only
D) II, III, and IV only
E) I, II, III, and IV

## 106

U.S. Treasury bills are currently yielding 4.15 percent and the market rate of return is 13.28 percent. Glasgo Glass has a beta of 1.18. The firm is considering expanding its current operations. This expansion will not affect the risk level of the firm. What is the required rate of return on the expansion project if both the firm and the project are totally financed with equity capital?
A) 98 percent
B) 14.92 percent
C) 23 percent
D) 19 percent
E) 82 percent

## 107

The Carpenter's Hut is considering an all-equity project that is equally as risky as the firm. The project has an internal rate of return of 14.89 percent. The company has a beta of 1.34 , the riskfree rate is 4.33 percent, and the market risk premium is 8.71 percent. This project ___ be accepted because the cost of equity capital is $\qquad$ percent.
A) should; 10.20
B) should; 14.85
C) should; 16.00
D) should not; 10.20
E) should not; 16.00

## 108

An all-equity firm should accept any independent all-equity project which has
A) risk similar to the current operations of the firm.
B) less risk than the firm's current operations.
C) an internal rate of return that is less than the cost of equity capital.
D) an internal rate of return that is greater than the cost of equity capital.
E) a rate of return which exceeds the risk-free rate.

## 109

The beta of security $i$ is equal to the $\qquad$ divided by the:
A) covariance of the security with the market; variance of the market.
B) covariance of the security with the market; beta of the market.
C) standard deviation of the security; variance of the market.
D) variance of the security; variance of the market.
E) covariance of the security with the market; standard deviation of the market.

## 110

Beta is the $\qquad$ of the characteristic line for a security which is developed when the returns of the security are plotted against the returns of $a(n)$ $\qquad$ —.
A) intercept; risk-free security
B) intercept; market index
C) slope; risk-free security
D) slope; market index
E) slope; industrial sector

## 111

Which one of the following definitions is correct?
A) The stated value of a share of stock, as it would be shown on a stock certificate, is called the book value.
B) Both a shareholder and a stockholder are terms that apply to only non-employee owners of common stock.
C) The maximum number of shares that a firm can issue as of today is referred to as the number of shares outstanding.
D) The dedicated capital of a firm is the number of shares of stock issued multiplied by the par value per share.
E) The number of shares of common stock that are owned by investors are referred to as the number of authorized shares.

## 112

The number of authorized shares is established in the:
A) corporate by-laws.
B) initial minutes of the board of directors' meeting.
C) articles of incorporation.
D) financial statements of the firm.
E) statutes of the state of incorporation.

## 113

The maximum number of shares of common stock that can be authorized is:
A) limited to the number of shares that are initially issued.
B) limited to five times the number of shares that are initially issued.
C) limited to ten times the number of shares that are initially issued.
D) limited by the state statute in the state of incorporation.
E) unlimited.

## 114

Bledsloe Industries has 150,000 shares of stock authorized of which 100,000 are issued. The board of directors has voted to sell as many additional shares as they can without seeking shareholder approval. What is the maximum number of additional shares than can be sold given this restriction?
A) 0
B) 50,000
C) 100,000
D) 150,000
E) unlimited

## 115

Which of the following are concerns which tend to limit the number of authorized shares?
I. limited par value
II. state taxes
III. limited dedicated capital
IV. investor concerns
A) I only
B) II only
C) I and III only
D) II and IV only
E) III and IV only

116
The River Café just issued 5,000 additional shares of $\$ 1$ par value stock at a sales price of $\$ 11.60$ per share. What is the total addition to capital surplus?
A) $\$ 1$
B) $\$ 10.60$
C) $\$ 5,000$
D) $\$ 53,000$
E) $\$ 58,000$

117
Black Rock, Inc., has 125,000 authorized shares of $\$ 1$ par value stock. The common stock account has a value of $\$ 87,500$ and the capital surplus account has a value of $\$ 452,000$. How many shares of stock are outstanding?
A) 37,500 shares
B) 62,500 shares
C) 87,500 shares
D) 125,000 shares
E) 452,000 shares

## 118

The Bridge Tire Company has a common stock account value of $\$ 45,000$, capital surplus of $\$ 179,000$, and retained earnings of $\$ 211,000$. The par value of the stock is $\$ 1$ and the market value of $\$ 22$ per share. Which one of the following statements is correct given this information?
A) The firm has a total market value of $\$ 435,000$.
B) The firm has 179,000 shares of stock outstanding.
C) If the firm sells one more share of stock at the current market value, the common stock account will increase by $\$ 22$.
D) The book value of equity is $\$ 224,000$.
E) The firm has earned a total of $\$ 211,000$ from its inception until today that it has not yet distributed to its shareholders.

## 119

A firm has $\$ 1$ par value common stock outstanding. The balance sheet shows a capital surplus amount of $\$ 74,000$, a common stock balance of $\$ 61,000$, and retained earnings of $\$ 58,000$. What is the book value per share?
A) $\$ 2.61$
B) $\$ 3.16$
C) $\$ 5.77$
D) $\$ 16.69$
E) $\$ 19.30$

## 120

Which of the following will increase the book value per share?
I. sale of newly issued shares at a market price which exceeds the book value of the previously issued shares
II. additional net income which is not being currently distributed to shareholders
III. a dividend payment
IV. a sale of newly issued shares at a time when the market value per share equals the book value per share
A) I and III only
B) II and IV only
C) I and II only
D) II and III only
E) I, II, and III only

121
You bought a stock five years ago. Po represents your purchase cost and P1 represents the price at the end of the first year that you owned the stock. The equation for computing the capital gain during the third year that you owned the stock is:
A) $\left(\mathrm{P}_{3}-\mathrm{P}_{2}\right) \div \mathrm{P} 2$.
B) $\left(P_{2}-P_{1}\right) \div P 0$.
C) $\left(P_{3}-P_{2}\right) \div P 0$.
D) $(P 3-P 0) \div P 0$.
E) $\left(P_{3}-P_{0}\right) \div P_{2}$.

122
You purchased a bond for $\$ 1,016$ one year ago. Today, you received the annual interest payment of $\$ 60$. The bond can be sold for $\$ 1,008$ today. Ignoring taxes, your total percentage return on this investment is $\qquad$ percent.
A) 98
B) 5.12
C) 47
D) 91
E) 23

## 123

One year ago, Betty purchased 200 shares of stock at a price of $\$ 27.15$ per share. The stock pays an annual dividend of $\$ 0.96$ per share. Today, the shares are selling for $\$ 28.07$ per share. The total dollar return is $\qquad$ and the total percentage return is $\qquad$ percent.
A) $\$ 184 ; 6.92$
B) $\$ 184 ; 7.47$
C) $\$ 184 ; 10.11$
D) $\$ 376 ; 6.92$
E) $\$ 376 ; 10.11$

## 124

Theresa purchased 600 shares of Black Tower Records stock at a price of $\$ 37.92$ per share. One year later, the shares were selling for $\$ 35.52$ each. What is the total dollar return for the year on this investment if the firm pays an annual dividend of $\$ 2.40$ per share?
A) $\$ 0$
B) $\$ 1,440$
C) $\$ 1,880$
D) $\$ 2,220$
E) $\$ 2,880$

## 125

One year ago, Jillian purchased 100 shares of Long Life Batteries (LLB) stock at a price of $\$ 58.17$ a share. LLB pays an annual dividend of $\$ 1.34$, which the firm paid this morning. Currently, the stock is priced at $\$ 60.09$ a share. For the year, the capital gain is $\qquad$ percent, the dividend yield is
$\qquad$ percent, and the total
return is $\qquad$ percent.
A) $20 ; 2.23 ; 5.43$
В) $30 ; 2.47 ; 5.77$
C) $3.30 ; 2.30 ; 5.60$
D) $40 ; 2.23 ; 5.63$
E) $40 ; 2.30 ; 5.70$

## 126

Last year at this time, you purchased 1,000 shares of Holiday Arts stock for $\$ 11.18$ a share. You just received the annual dividend of $\$ 0.025$ a share. Today, you sold your shares for $\$ 14.20$ a share.
What is your total percentage return on this stock?
A) 40 percent
B) 60 percent
C) 80 percent
D) 16 percent
E) 27.24 percent

127
One year ago, you purchased 300 shares of Amos Companies at a price of $\$ 36.15$. Today, you sold the stock for $\$ 34.10$. Your total percentage return on this investment is -3.90 percent. What is the
dollar amount of the annual dividend?
A) $\$ 0.39$
B) $\$ 0.64$
C) $\$ 1.06$
D) $\$ 1.21$
E) $\$ 1.34$

## 128

One share of Rosie's common stock sold for $\$ 79$ one year ago. For this year, the company has a total return of 7.19 percent and a dividend yield of 4.43 percent. The annual dividend is $\qquad$ and the capital gain for the year is $\qquad$ .
A) $\$ 2.75 ; \$ 2.18$
B) $\$ 2.75 ; \$ 3.10$
C) $\$ 2.90 ; \$ 3.10$
D) $\$ 3.50 ; \$ 2.18$
E) $\$ 3.50 ; \$ 3.10$

## 129

You purchased a bond on January 1 for $\$ 921.40$ that has a $\$ 1,000$ face value and an 8 percent annual coupon. Now, one year later, the bond is selling for $\$ 1,034.20$. What is the total dollar return on this bond for the year?
A) $\$ 32.80$
B) $\$ 112.80$
C) $\$ 120.80$
D) $\$ 152.80$
E) $\$ 192.80$

130
Last year on this date, you purchased 1,000 shares of preferred stock for $\$ 50.50$ per share. The stock pays an annual dividend per share of 7 percent of the $\$ 100$ par value. Today, this stock is worth
$\$ 52$ a share. What is your total dollar return for this past year assuming that you wish to continue owning these shares?
A) $\$ 1,500$
B) $\$ 1,650$
C) $\$ 7,700$
D) $\$ 8,500$
E) $\$ 9,000$

