# CFA Level 1 考前精選題目演練

**(All but Financial Statement Analysis and Corporate Finance)**

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## Markets and Instruments

1. Which of the following statements regarding call and continuous markets is FALSE?

A. Call markets may be used to determine a stock price in the event trading is suspended
B. In a continuous market, dealers determine stock prices rather than by auction in order to avoid interruptions in the market place
C. The New York Stock Exchange sometimes uses call markets to determine an opening stock price
D. In a continuous market trades can occur any time the market is open

2. Which of the following statements about security markets is FALSE?

A. The fourth market refers to the direct trading between two parties without a broker intermediary
B. The secondary market refers to the trading of outstanding securities
C. The third market refers to the OTC trading in exchange listed securities
D. Primary market refers to the trading of securities on a major market such as the NYSE in the US

3. Which of the following statements about markets or short selling is FALSE?

A. Secondary markets provide liquidity for primary market investors
B. Internal market efficiency means getting the lowest possible transaction costs
C. The third market is the direct exchange of securities between investors
D. A short seller must pay all dividends to the lender of the stock

4. Which of the following statements about trading stocks or securities markets is FALSE?

A. If an investor puts up 60% of the value of a stock purchase and margins the remaining 40%, the leverage factor is 1.67 times
B. The NASDAQ is an example of an over-the-counter market

C. Commission brokers at the New York Stock Exchange trade for their own accounts
D. A stop-buy is placed above the market price to protect short sellers of a security

5. An investor buys 200 shares of ABC at the market price of $100 on full margin. The initial margin requirement is 40% and the maintenance margin is 25%. What is the leverage factor of the margin purchase?

A. .60
B. 2.50
C. .40
D. 4.00

6. An investor buys 300 shares of ABC at the market price of $100 on full margin. The initial margin requirement is 40% and the maintenance margin requirement is 25%. At what price will the investor get a margin call?

A. $100
B. $80
C. $112
D. $48

7. There are two stocks in an index:

- Company A has 50 shares valued at $2 each
- Company B has 10 shares valued at $10 each
- Company C has 20 shares value at $3 each
- When the index started the price weighted index calculated out to 5, and the value-weighted index was 1

The value of Stock B did not change but now Company A's stock is selling for $3 per share and Company C's stock doubles its price. What is the new price-weighted index, and what is the new value-weighted index?

A. Price-weighted =3.8; value-weighted=1.234
B. Price-weighted=3.8; value-weighted=1.423
C. Price-weighted=6.33; value-weighted=1.234
D. Price-weighted=6.33; value-weighted=1.423

8. The statement, stock prices fully reflect all information from public and private sources, can be attributed to which form of the efficient market hypothesis (EMH)?

A. Weak-form EMH

B. Semiweak-form EMH
C. Semistrong-form EMH
D. Strong-form EMH

9. Which of the following is NOT an assumption behind the semistrong-form of the efficient market hypothesis?

A. Investors adjust their expectations rapidly when confronted with new information
B. A large number of profit-maximizing participants
C. The timing of news announcements are independent of each other
D. All information is cost-free and available to everyone at the same time

## Equity valuation

1. If Heritage Company's current dividend per share is $1.00, its current market price is $25, and its growth rate is 8%, what is the implied rate of return on the company's stock?

a. 8.0%
b. 12.0%
c. 12.3%
d. 15%

2. Ajax Corporation common shares are trading at $40. The company's current yield is $2.00 per share. Over the long run, the dividends are expected to grow at 5% per year. Ajax shares have a market beta of 1.4. If the risk-free rate is 6% and the market premium is 3%, which of the following statements is true?

a) Ajax common shares should be sold because their implied return is 10% and their required return is 10.2%
b) Ajax common shares should be bought because their implied return is 10.25% and their required return is 10.2%
c) Ajax common shares should be sold because their implied return is 10.25% and their required return is 10.2%
d) Ajax common shares should be bought because their implied return is 10.2% and their required return is 10.25%

3. In the top-down approach to valuation, industry analysts should be conducted before company analysis because:

A. the goal of the top-down approach is to identify those companies in non-cyclical industries with the lowest P/E ratios

B. most valuation models recommend the use of industry-wide average required returns, rather than individual returns
C. the goal of the top-down approach is to identify those companies in cyclical industries with the highest P/E ratios
D. an industry's prospects within the global business environment are a major determinant of how well individual firms in the industry perform

4. Which of the following statements concerning security valuation is FALSE?

A. Determining the value of a company with supernormal growth requires finding the present value of dividends during the supernormal growth and adding that to the present value of the stock computed for the period of normal growth
B. A firm with an expected dividend payout ratio of 40%, a required rate of return of 12%, and a dividend growth rate of 5% has an estimated price to earnings (P/E) ratio of 5.7X
C. A firm with a 20% return on equity (ROE) and a dividend payout ratio of 30% will have a sustainable growth rate of 14%
D. The top-down valuation approach requires an assessment of industry influences on the company's value first, then stock-specific influences

5. Which of the following statements concerning security valuation is FALSE?

A. in the investment process, the most important decision is selecting the proper valuation method
B. if the current price of the security is $15 and the analyst using the dividend discount model determines a value of $10, the analyst should issue a sell recommendation
C. The dividend discount model (DDM) assumes that the growth rate of the firm's dividend is less than the required rate of return
D. Firms with abnormally high return on equity (ROE) will probably retain a large portion of their earnings

6. Which of the following statements concerning security valuation is FALSE?

A. A preferred stock with a dividend of $3.00 per share and a required rate of 11.5% is estimated at be worth $26.09 currently
B. A stock with a dividend last year of $3.25 per share, an expected dividend growth rate of 3.5%, and a required return of 12.5% is estimated to be worth $36.11
C. A stock to be held for two years with a year-end dividend of $2.20 per share, an estimated value of $20.00 at the end of two years, and a required return of 15% is estimated to be worth $18.70 currently
D. A stock with an expected dividend payout ratio of 30%, a required return

of 8%, an expected dividend growth rate of 4%, and expected earnings of $4.15 per share is estimated to be worth $31.13 currently

7. Which of the following statements concerning a stock market series is FALSE?

A. If the dividend payout ratio is 40%, the return on equity (ROE) is 10%, the nominal risk-free rate is 4%, and the risk premium is 6%, the P/E ratio of the index should be 10
B. If the growth rate of dividends for stocks in an index increases, then the price to earnings (P/E) ratio should decrease
C. If capital expenditures are currently high, an investor should expect depreciation to grow at an above-average rate
D. If stocks in a market index are expected to earn $44.23 in the coming year, are expected to pay out $18.58 in dividends, and the analyst projects an earnings multiple of 17 times, the rate of return is 9.53% if the investor buys the index at the beginning of the year for 703.47

8. Which of the following statements about the industry life cycle is FALSE?

A. In the stabilization phase, profit margins tighten and ROE approaches normality
B. The creation of a new industry is generally brought about by a technological breakthrough
C. The industry life cycle refers to the regular pattern of growth, maturity, and decay experienced by most new industries
D. In the rapid growth phase, the sales growth rate is high, but profit margins are low

9. Assume the industry's beta is 1.2, profit margin is 7%, turnover is 1.3X, asset/equity leverage is 1.5, risk-free rate is 4%, the market equity premium is 8%, and the industry expected payout is 20% of earnings as dividends. Estimate the industry's price-to-earnings (P/E) multiplier.

A. 19.05X
B. 7.46X
C. 29.85X
D. 16.67X

10. Which one of the following would be a bearish signal to a smart-money technical analyst?

A. The T-bill Eurodollar spread widens
B. The ratio of short sales by specialists to total short sales becomes abnormally low
C. The debit balances in brokerage accounts increase
D. The differential between high-quality and low quality bonds decreases

11. A stock is expected to pay a dividend in one year of $3.00. Dividends are expected to grow at a rate of 15% in years two and three, and then slow down to 4% per year in perpetuity thereafter. The required return is 18%. An analyst mistakenly used the constant growth dividend discount model and assumes the perpetual growth rate will be 15% forever. By how much does he overestimate or underestimate the stock's actual value?

A. Overstates by $8.85
B. Overstates by $75.33
C. Overestimates by $65.77
D. Overestimates by $74.63

12. John Doyle pays $1,329 for 100 shares of stock. At the end of the first year, the stock pays a 40-cent dividend per share and is priced at $15.34 per share. Doyle buys 100 more shares at the end of the first year. At the end of the second year, the stock pays a 46-cent dividend per share and Doyle sells the stock for $15.85 a share. Which of the following statements concerning the dollar weighted and time-weighted returns of Doyle's stock investment is **TRUE**? The:

A. time-weighted return is 10.24%
B. time-weighted return is 12.21%
C. dollar-weighted return is 11.74%
D. dollar-weighted return is 14.38%

## Fixed Income Valuation

1. Which of the following statements about collateralized obligations (CMO) is TRUE?

A. The holder of CMOs receive a pro-rata share of all principal payments on a monthly basis, while interest is deferred on an accrual basis to maturity
B. The creation of CMOs pretty much eliminated prepayment risks for investors
C. CMOs were developed as a way to offset the maturity problems encountered with traditional mortgage-backed securities (MBSs)
D. The introduction of the CMO enabled issuers to extend the life of

traditional mortgage-backed securities

2. A bond with a face value of $1,000 pays a semi-annual coupon of $60. It has 15 years to maturity and a yield to maturity of 16% per year. What is the value of the bond?

A. $697.71
B. $943.06
C. $832.88
D. $774.84

3. Suppose the term structure of interest rates makes an instantaneous parallel upward shift of 100 basis points. Which of the following securities experiences the *largest* change in value? A five-year:

A. floating rate bond
B. zero-coupon bond
C. coupon bond with a coupon rate of 6%
D. coupon bond with a coupon rate of 5%

4. A 30-year 10% annual coupon bond is sold at par. It can be called at the end of 10 years for $1,100. What is the bond's yield to call (YTC)?
A. 10.0%
B. 10.6%
C. 10.2%
D. 8.9%

5. Suppose that IBM has a $1,000 par value bond outstanding with a 12% semiannual coupon that is currently trading at 102.25 with seven years to maturity. Which of the following is *closet* to the yield to maturity on the bond?

A. 11.52%
B. 11.21%
C. 11.64%
D. 11.91%

6. PG&E has a bond outstanding with a 7% semiannual coupon that is currently prices at $779.25. The bond has remaining maturity of 10 years but has a first put date in 4 years at the par value of $1,000. Which of the following is *closet* to the yield to first put on the bond?

A. 11.26%
B. 7.73%
C. 14.92%
D. 14.46%

7. In which of the following conditions is the bond selling at a premium coupon rate?

A. is less than current yield, which is greater than yield-to-maturity
B. is greater than current yield, which is greater than yield-to-maturity
C. is less than current yield, which is less than yield-to-maturity
D. current rate and yield-to-maturity are all the same

8. In which of the following cases is the bond selling at a discount? The coupon rate is:

A. greater than current yield and current yield is greater than yield-to-maturity
B. smaller than current yield and current yield is greater than yield-to-maturity
C. greater than current yield and current yield is smaller than yield-to-maturity
D. smaller than the current yield and current yield is smaller than yield-to-maturity

9. An investor purchases a 4-year, 6.9%, $1,000 face value Treasury bond expected to yield 10.5%. Due to a downturn in the economy, the investor is forced to reinvest the coupon payments at 7.00%. All else equal, what is the impact to the realized return?

The realized return:

A. will be less than the 10.5% yield to maturity
B. is not affected because Treasury bond coupon payments are guaranteed
C. will be greater than the 10.50% yield to maturity
D. remains the same because the bond's appreciation will make up the difference

10. The six-month Treasury bill yields 6%. The one-year Treasury yields 6.5%. If a Treasury note with a maturity of 1.5 years and a coupon rate of 8% is currently priced to yield 9%, what's the current spot rate for the 1.5 year maturity?

A. 9.11%
B. 6.50%
C. 6.00%
D. 7.00%

11. If a Treasury bond has a duration of 10.27 and convexity of 71.51. Which of the following is closet to the estimated percentage price change in the bond of a 125 basis point increase in interest rates?

A. -12.73%
B. -9.32%
C. -11.72%
D. -13.96%

12. A portfolio manager wants to calculate the convexity of a 6% coupon, 10-year, $1,000 par value bond that is currently priced at $1,012.45. He estimates that if rates rise by 50 basis points, the bond's price is $975.93. He also estimates that if rates fall by 50 basis points, the bond's price is $1,050.75. Which of the following is closet to the convexity of the bond?

A. 28.78
B. 41.17
C. 32.29
D. 35.16

13. Generally, bonds with shorter durations will have maturities and coupon that are:

A. Maturity longer; Coupon shorter
B. Maturity shorter; Coupon lower
C. Maturity longer; Coupon higher
D. Maturity shorter; Coupon higher

14. Which of the following bonds has the longest duration?

A. A 10-year maturity, 5% coupon bond
B. A 8-year maturity, 5% coupon bond
C. A 8-year maturity, 0% coupon bond
D. A 10-year maturity, 0% coupon bond

15. Which of the following is FALSE?

A. Holding other things constant, the duration of a bond increases with time to maturity
B. Duration is a better measure of a price sensitivity to interest rate changes than is time to maturity
C. Given time to maturity, the duration of a zero coupon decreases with yield to maturity
D. Given time to maturity and yield to maturity, the duration of a bond is higher when the coupon rate is lower

16. Which of the following bond portfolio strategies would an analyst recommend if he believes that the market interest rate is about to fall? Sell the:

A. Shorter duration bonds and buy those with longer duration
B. Longer duration bonds and buy those with even longer duration
C. Longer duration bonds and buy those with shorter duration
D. Shortest duration bonds and buy those with even shorter duration

17. A non-callable bond with 10 years remaining has an annual coupon of 5.5% and a $1,000 par value. The current yield to maturity on the bond is 4.7%. Which of the following is closet to the estimated price change of the bond using duration if rates rise by 75 basis points?

A. -$69.14
B. -$5.68
C. -$61.10
D. -$47.34

18. A non-callable bond has an effective duration of 7.26. Which of the following is the closet to the appropriate price change of the bond with a 25 basis point increase in rates using duration?

A. -1.82%
B. .018%
C. 1.82%
D. -.18%

19. A non-callable bond with 4 years remaining maturity has an annual coupon of 12% and a $1,000 par value. The current price of the bond is $1,063.40. Which of the following is *closet* to the effective duration of the bond?

A. 3.11
B. 2.52
C. 2.94
D. 3.27

## Derivatives

1. Which of the following statements about the potential profits and from buying call is TRUE? Profits are:

A. limited to the strike price plus the premium paid. Losses are limited to the initial premium paid
B. limited to the strike priced minus the premium paid. Losses are theoretically unlimited
C. and losses are theoretically unlimited
D. theoretically unlimited. Losses are limited to the initial premium paid

2. Which of the following statements regarding the seller of a call and the seller of a put is TRUE? A call writer:

A. expects the price of the underlying stock to decrease below the strike price and a put writer expects the price of the underlying stock to increase above the strike price
B. and a put writer both expect the price of the underlying stock to decrease below the strike price
C. and a put writer both expect the price of the underlying stock to increase above the strike price
D. expects the price of the underlying stock to increase above the strike price and a put writer expects the price of the underlying stock to decrease below the strike price

3. A put on Stock X with a strike price of $40 is priced at $3.00 per share; while a call with a strike price of $40 is priced at $4.5. What is the maximum per share loss to the writer of the uncovered put and the maximum per share gain to the writer of the uncovered call?

A. $40.00, $40.00
B. $37.00, $35.5
C. $40.00, $4.5
D. $37.00, $4.5

4. Consider a U.S. investor who has a portfolio of Australian government bonds that are denominated in Australian dollars. Why would the investor wish to enter into a swap contract? As the:

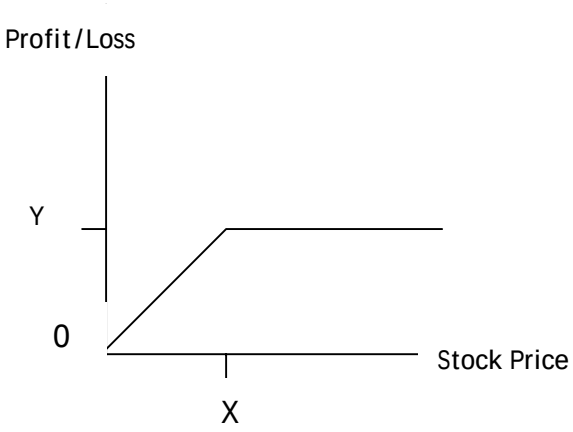
A. US interest rate decreases, the value of the Australian bonds decreases
B. Australian dollar decreases in value, the interest payments from the Australian bonds translate into fewer US dollars
C. Australian dollar increases in value, the interest payments from the Australian bonds translate into fewer US dollars
D. Australian interest rate decreases, the value of the Australian bonds decreases

5. The potential profits from writing a covered call position on a stock are:

A. limited to the premium
B. limited to the premium plus stock appreciation up to the exercise price
C. less than those of a short call

D. greater than the potential profits from owning the stock

6. Given the covered call option diagram below and the following information, what are the dollar values for points X and Y? The market price of the stock is $70, the strike price of the call is $80, and the call premium is $5

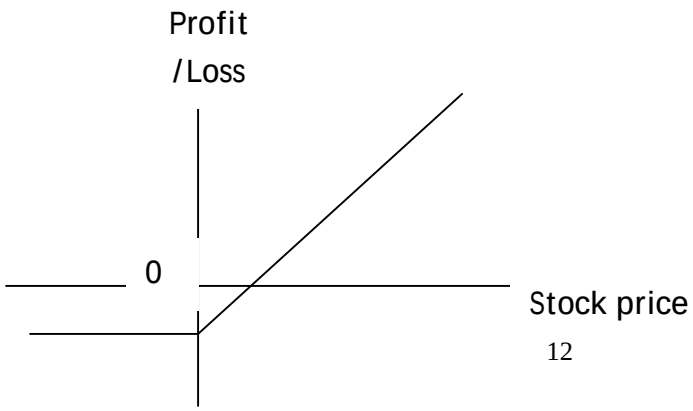



A. $80, and point Y represents a dollar value of $5
B. $75, and the point Y represents a dollar value of $15
C. $80, and point Y represents a dollar value of $15
D. $70, and point Y represents a dollar value of $15

7. In June, Todd Puckett bought stock in SBC Communications for $32 per share. At that time, Puckett sold an equivalent number of call options on SBC with an exercise price of $35 for $2.75. In September, at expiration, the stock is trading at$26. What is Puckett's profit per share from his covered call strategy? Puckett:

A. Lost $4.00
B. Lost $3.25
C. Lost $6.25
D. Lost $1.25

8. The following profit/loss diagram is for what type of position?



A. Long stock, long put (portfolio insurance)
B. Long stock, short call (covered call)
C. Long Call
D. Both A and C

9. Which of the following is TRUE regarding the potential profit and loss from a portfolio insurance strategy? Profit is:

A. limited to the premium and the loss is limited to the exercise price less the premium
B. limited to the exercise price less the premium and loss is limited to the premium
C. unlimited and loss is limited to the premium
D. unlimited and loss is limited to the premium plus the difference between stock purchasing price and the put option's strike price

10. XYZ, Inc. has entered into a "plain-vanilla" interest rate swap on $5,000,000 notional principal. XYZ company pays a fixed rate of 8.0% on payments that occur at 180-day intervals. Platteville Investments, a swap broker, negotiates with another firm, SSP, to take the received-fixed side of the swap. The floating rate payment is based on LIBOR (currently at 8.2%). At the time of the next payment (due in exactly 180 days), when LIBOR beefs up to 8.4%, XYZ company will:

A. receive net payments of $5,000
B. pay the dealer net payments of $5,000
C. pay the dealer net payments of $10,000
D. receive from the dealer of $10,000

11. DWR Services, Ltd., arranges a plain vanilla interest rate swap between RWDY Enterprises (pay fixed) and RED, Inc. (receives fixed). The swap has a notional value of $25,000,000 and 270 days between payments. LIBOR is currently at 7.0%. If at the time of the next payment (due in exactly 270 days), RWDY receives net payments of $93,750, the swap fixed rate is closet to:

A. 6.500%
B. 6.625%
C. 7.375%
D. 7.500%

12. No Errors Printing has entered into a "plain-vanilla" interest rate swap on $1,000,000 notional principal. No Errors receives a fixed rate of 5.5% on payments that occur at quarterly intervals. Platteville Investments, a swap broker, negotiates with another firm, Perfect Bid, to take the pay-fixed side of the swap. The floating rate payment is based on LIBOR (currently at 6.0%). Because of the current interest rate environment, No Errors expects to pay a net amount at the next settlement data and has created a reserve to cover the cash outlay. At the time of the next payment (due in exactly one quarter), the reserve balance is $1,000. To fulfill its obligations under the swap, No Errors will need approximately how much additional cash?

A. $667
B. $250
C. No Errors will receive $250
D. $0

13. Consider a commercial bank that makes an adjustable rate mortgage for a customer. Which of the following would be an appropriate position for the bank to hedge its risk with this loan? Pay:

A. fixed to a currency swap counterparty and receive variable
B. fixed to an interest rate swap counterparty and receive variable
C. variable to a currency swap counterparty and received fixed
D. variable to an interest rate swap counterparty and receive fixed

14 A US bank enters into a plain vanilla currency swap with a notional principal of US$250 million (GBP£150 million). At each settlement date, the US bank pays a fixed rate of 4.5% on the British pounds received and the British banks pays a variable rate equal to LIBOR on the US dollar received. Given the following information, what payment is made to whom at the end of year 2 assuming the payment is made annually?

| 0 | 1 | 2 |
|---|---|---|
| LIBOR=4% | LIBOR=4.5% | LIBOR=5% |

The US bank pays:

a. £6.75 million and the British bank pays US$11.25 million
b. £6.75 million and the British bank pays US$12.5 million
c. US$12.5 million and the British bank pays £6.75 million
d. US$11.25 million and the British bank pays £6.75 million

## Alternative Investments

1. A property has a potential gross rental income (PGR) of $273,000. Operating expenses, excluding insurance and property taxes, amount to 30% of gross rents. Insurance and property taxes total $10,600. If the market capitalization rate is 21.00%, what is the value of this property?

A. $874,667
B. $636,000
C. $859,524
D. $960,476

## Portfolio Management

1. A company's beta is that:

A. excess return above its expected risk-adjusted return
B. standard deviation of its rates of return
C. average rate of return over the long-term
D. covariance of returns with the market portfolio

2. A change in the expected rate of inflation will result in:

A. movement along the security market line
B. a parallel shift in the security market line
C. a change in the slope of the security market line
D. an increase in the stock's beta

3. The slope of the security market line (SML) changes over time. Which of the following would cause a steeping in the slope of the SML?

A. The market becomes more optimistic, causing an increase in the market risk premium
B. Inflation increases, causing an increase in the market risk premium
C. Inflation decreases, causing an increase in the market risk premium
D. The market becomes more pessimistic, causing an increase in the market risk premium

4. If there are two assets that are perfectly positively correlated, what would be their combined standard deviation of 30% of an investor's funds were put in the asset with a standard deviation of .3 and 70% were invested in an asset with a standard deviation of .4?

A. .370

B. .151
C. .426
D. .244

5. Byron Landers invests 40% of his money in a stock with an expected return of 15% and a standard deviation of 8.5%. He invests the remainder of his money in Treasury bills that earn 4.5%. What are the expected return and the expected standard deviation of the portfolio?

A. Expected return is 8.70%; Expected standard deviation is 2.82%
B. Expected return is 8.70%; Expected standard deviation is 0
C. Expected return is 8.70%; Expected standard deviation is 0.12%
D. Expected return is 8.70%; Expected standard deviation is 3.40%

6. All portfolios on the Capital Market Line are:

A. perfectly negatively correlated
B. unrelated except that they all contain the risk-free asset
C. perfectly positively correlated
D. distinct from each other

## Ethics

1. Sanctions that AIMR may impose on its members include:
   I. revocation of the member's registration as an investment advisor.
   II. private censure.
   III. monetary find.
   IV. public censure.
   a. I and III only.
   b. II and IV only.
   c. II, III, and IV only.
   d. I, II, III, and IV.

## Quantitative Analysis

**Use the following data to answer the following four questions:**

To help gain a better understanding of the relationship between the return on the common stocks of small companies and the return on the S&P 500 index, you run a simple linear regression to quantify this relationship, using the monthly return on small stocks as the dependent variable and the monthly return on the S&P500 as the independent variable. The results of the regression are shown below:

| | Coefficient | Standard error of Coefficient | t-Value |
|---|---|---|---|
| Intercept | 1.71 | 2.95 | 0.58 |
| S&P 500 | 1.52 | 0.13 | 11.69 |

The t-statistic critical value at the 0.01 level is 2.58
Standard error of estimate=19.85%
Correlation coefficient=0.7740
N=100
F-Value=101.645 on 1/73 degrees of freedom

1. Use the regression statistics presented above and assume this historical relationship still holds in the future period. If the expected return on the S&P 500 over the next period were 3%, the expected return on small stocks over the next period would be:

a. 4.56%
b. 5.13%
c. 6.27%
d. 6.65%

2. The percent of the variation in the return on the dependent variable (return on small stocks) explained by the return on the independent variable (return on the S&P 500) for the period under study was:

a. 10.07%
b. 19.85%
c. 59.91%
d. 77.40%

3. The regression statistics presented above indicate that at the 0.01 level, the slope coefficient(1.52)

a. and the y-intercept (1.71) are both statistically significant
b. and the y-intercept (1.71) both lack statistical significance
c. is *not* statistically significant, but the y-intercept (1.71) is statistically significant
d. is statistically significant, but the y-intercept (1.71) is *not* statistically significant

4. The regression statistics presented indicate that the standard deviation of the difference between the actual returns on small stocks and the estimate of those returns is:

a. 1.985%

b. 1.41%

c. 2.95%

d. 19.85%

5. Given the following information, determine what percentage of the variation of Y is NOT explained by the regression.

$Y = 16 - 4X$

$\sigma_y = 12$

$\sigma_x = 15$

$cov_{yx} = 120$

a. 66.7%

b. 33.3%

c. 44.4%

d. 55.6%

6. An analyst makes the following estimates:

| | | Rate of Return | |
|---|---|---|---|
| Scenario | Probability | Stock I | Stock J |
| 1 | 0.5 | 0.30 | 0.20 |
| 2 | 0.5 | 0.10 | -0.10 |

Based on these data, the covariance between the rates of return on Stock I and Stock J is:

a. –0.0163.

b. +0.0500.

c. +0.0150.

d. +0.2000.

7. An analyst developed the following data on Stock X and the market:

Return on the market = 0.1200

Covariance between the return on Stock X and the return on the market = 0.0288

Correlation coefficient of the return on Stock X and the return on the market = 0.8000

Standard deviation of the return on Stock X = 0.1800
Standard deviation of the return on the market =0.2000

Based on these data, the beta of Stock X is:

a. 0.144.
b. 0.720.
c. 0.800.
d. 0.889.

8. An analyst regresses the excess returns of Stock J against the returns on a market index, M. Using the following regression equation,

$R_j = a_j + b_j \ R_M + e_j$

which of the following statements is true?

I. The intercept, a, is the amount of Stock J's price movement explained by the market.
II. The term b is the slope of the regression line and is assumed to be constant.
III. The disturbance term, $e_j$ is assumed to be uncorrelated with the explanatory variable, $R_M$ and of zero expectation.

a. I only.
b. II only.
c. II and III only.
d. I, II, and III.

9. In hypothesis testing, which of the following statements about Type I and Type II errors is true?

I. A Type I error refers to accepting the null hypothesis when it is false.
II. A Type II error refers to rejecting the null hypothesis when it is true.
III. Minimizing the probability of a Type II error maximizes the power of the test.

a. I only.
b. II only.
c. III only.
d. I, II, and III.

10. An analyst conducts a two-tailed t-test to determine whether a sample mean involving 100 observations differs from a theoretical mean of zero. The computed t-statistic is 2.90. Using a 5 percent significance level,

which of the following conclusions is the most appropriate to reach?

a. Reject the null hypothesis and accept the alternative hypothesis that the sample mean is significantly different from zero.
b. Accept the null hypothesis that the sample mean is not significantly different from zero.
c. Refrain from drawing a conclusion because the number of observations is insufficient.
d. Reject the alternative hypothesis that the sample mean is significantly different from zero.

11. An investment strategy has an expected return of 12 percent and a standard deviation of 10 percent. If investment returns are normally distributed, the probability of getting a return less than 2 percent is closest to:

a. 10%.
b. 16%.
c. 32%.
d. 34%.

12. Based on a normal distribution with a mean of 500 and standard deviation of 150, what is the value for an observation at 200?

a. –2.00.
b. –1.75.
c. 1.75.
d. 2.00.

13. An investor wants to have $1 million when she retires in 20 years. If she can earn a 10 percent annual return, compounded annually, on her in vestments, the lump-sum amount she would need to invest today to reach her goal is closest to:

a. $100,000.
b. $117,459.
c. $148,600.
d. $161,506.

14. If the standard deviation of a population is 100 and a sample size taken form that population is 64, what is the standard error of the sample

means?

a. 0.08.
b. 1.56.
c. 6.40.
d. 12.50.

15. In hypothesis testing, a Type II error is the event of:

a. rejecting the null hypothesis when it is true.
b. rejecting the null hypothesis when it is false.
c. accepting the null hypothesis when it is true.
d. accepting the null hypothesis when it is false.

16. An analyst is estimating Microsoft Corp's stock beta using the past 60 trading day's closing prices against S&P 500's. His estimate is 1.3531 and he is wondering if the beta is significantly different from the market beta. The following is the table from his statistics software result:

| Regression Statistics | | | |
|---|---|---|---|
| Multiple R | | 0.5411 | |
| R-squared | | 0.2928 | |
| Standard error of estimate | | 0.0835 | |
| Observations | | 60 | |
| | Coefficient | Standard Error | *t*-statistics |
| Alpha | 0.00267 | 0.0117 | 2.2819 |
| Beta | 1.3531 | 0.2761 | |

Calculate the t statistic and, using the significant level of 1%, conclude if Microsoft's Beta is different from the market beta?

| | t-statistic | Microsoft's Beta |
|---|---|---|
| a. | 4.0901 | different from market beta |
| b. | 2.2819 | different from market beta |
| c. | 1.3531 | equal to market beta |
| d. | 1.2789 | equal to market beta |

*The following three questions tests how to use the ANOVA table:*

*Simplified ANOVA Table*

| Source | DF | SS | MSS |
|---|---|---|---|
| Regression | 1 | 185 | 185.00 |
| Error | 16 | 148 | 9.25 |
| Total | 17 | 333 | 194.25 |

The F value at significance level of 0.05 with 1/16 degree of freedom is 4.49

17. Using the ANOVA table, the coefficient of determination is:

a. 0.5556

b. 0.8000

c. 0.9524

d. 0.7454

18. Using the ANOVA table, the standard error of the estimate is:

a. 13.6015

b. 3.0414

c. 12.1655

d. 148.00

19. Using the ANOVA table, calculate the F-statistic and determine to reject that the hypothesis that the regression coefficient is zero :

| | F-Value | Reject the Null |
|---|---|---|
| a. | 0.0500 | Yes |
| b. | 20.000 | Yes |
| c. | 4.4721 | No |
| d. | 0.2236 | No |

## Economics

### Microeconomics

1. When the price elasticity of demand is inelastic:
a. price and total revenue move in the same direction.
b. price and total revenue move in the opposite direction.
c. total revenue increases whether price goes up or down.
d. total revenue remains constant whether price moves up or down.

2. In a monopolistically competitive market, which of the following statements is (are) correct?

I. Firms will seek to maximize profits by producing that quantity where MR=MC

II. In the long run, firms ill charge prices that are equal to their average cost of production

III. Firms will charge prices that exceed their marginal costs.

a) I only
b) I and III only
c) II and III only
d) I, II and III

3. A purely competitive firm will tend to expand its output so long as:
A) its marginal revenue is positive
B) the market price is greater than marginal cost
C) the marginal cost is greater than marginal revenue
D) the marginal revenue is great than price

4. A profit-seeking firm will most likely continue production in the short run if the product price at least exceeds:

a. total cost per unit of output.
b. fixed cost per unit of output.
c. average cost per unit of output.
d. variable cost per unit of output.

5. For most products, the long-run price elasticity of demand is:

a. less than the short-run price elasticity of demand.
b. greater than the short-run price elasticity of demand.
c. more likely to increase than the short-run price elasticity of demand.
d. more likely to decrease then the short-run price elasticity of demand.

6. A realistic objective of government regulation of a natural monopoly is to:

a. expand output so consumer demand is fully met.
b. provide incentives of potential competitors to enter the market.
c. reduce the product price to the supplier's marginal cost per unit of

output.

d. reduce the product price to the supplier's average total cost per unit of output.

**Macroeconomics**

1. One of the primary objectives of a supply-side tax cut is to:
A. increase foreign exports
B. increase saving and investment
C. decrease the amount of money circulating in the economy
D. increase the supply of money circulating in the economy

2. If the public expects inflation caused by expansionary policy to be greater than what actually occurs, then the expansionary policy will:
A) temporarily increase the unemployment rate
B) temporarily decrease the unemployment rate
C) leave the unemployment rate unchanged
D) reduce the natural rate of unemployment

3. Based on historical data and assuming less-than-full employment, periods of sharp acceleration in the growth rate of the money supply tend to be associated initially with:

a. periods of economic recession.
b. an increase in the velocity of money.
c. a rapid growth of gross domestic product.
d. reductions in real gross domestic product.

4. According to the adaptive expectations hypothesis, when the inflation rate is accelerating, individuals will tend to make a systematic error by:

a. overestimating the future inflation rate.
b. underestimating the future inflation rate.
c. assuming the future inflation rate will eventually decline.
d. assuming the future inflation rate will continue to accelerate.

5. When the effects of expansionary monetary policy are fully anticipated, what impact does that policy tend to have on real economic activity?

a. Little or no impact.
b. Large expansionary impact.
c. Moderate expansionary impact.
d. Moderate contractionary impact.

**International Business**

1. Assume that a British investor has 10 million pounds (£) to invest. This investor could buy Euros at a rate of £0.625 per Euro, or Canadian dollars at a rate of 0.46 £/$can. Assume also that the investor could buy Euros at a rate of $Can1.41 per euro. This investor could earn a riskless profit by (assume no transaction costs):

A. buying $Can, using $Can to acquire Euros, and then selling Euros for pounds
B. buying Euros, using Euros to buy $Can, and then selling $Can for pounds
C. buying equal amounts of $Can and Euros
**D.** cannot be determined from information given

2. If the exchange rate value of the British pound goes from US$1.80 to US$1.60, then:

a. the pound has appreciated, and the British will find U.S. goods cheaper.
b. the pound has appreciated, and the British will find U.S. goods more expensive.
c. the pound has depreciated, and the British will find U.S. goods more expensive.
d. the pound has depreciated, and the British will find U.S. goods cheaper.

3. Under a system of fixed exchange rates, a nation experiencing an excess of imports over exports can try to remedy this situation by:

a. adopting tariffs and quotas.

b. reducing its income from investments abroad.
c. applying an expansionary macroeconomic policy to drive prices up and interest rates down.
d. building up its reserves of foreign currencies and reserve balances with the International Monetary Fund

4. Under a system of fixed exchange rates, a nation can try to remedy its balance-of-payments deficit by:

a. applying expansionary macroeconomic policy to drive prices up and interest rates down.
b. applying restrictive macroeconomic policy to keep prices down and interest rates up.
c. reducing its income from investments abroad.
d. building up its reserves of foreign currencies and reserve balances with the International Monetary Fund.

5. A Japanese automobile manufacturer builds an automobile plant in the United States. In the foreign exchange market, this action creates:

a. a demand for dollars and a supply of yen.
b. a demand for both dollars and yen.
c. a supply of dollars and a demand for yen.
d. a supply of both dollars and yen.