Equity Income

1) Which of the following statements is false with respect to the procedure involved in buying stocks on margin?

A) The margin and the debit balance are inversely related.
B) A restricted account is one where the initial margin falls below the minimum initial margin requirement.
C) Investor's equity is really the difference between the market value of the account and the outstanding debit balance.
D) Margin refers to that portion of the total account that is financed by way of a loan from the broker.

. .

2) Zanex Corp. shares are currently trading at $38.50. Further research reveals the following:

Current Dividend:	$1.35
Normalized Growth Rate:	6%
Zanex Corp. beta:	0.89
Risk-free rate:	4%
Expected market return:	10.5%

Which of the following statements is true?

A) This stock is overvalued by $0.69.
B) This stock is undervalued by $0.69.
C) This stock is overvalued by $2.83.
D) This stock is correctly priced.

. .

3) Which of the following statements is (are) true with respect to methods that may be used in order to form an estimate of an industry's P/E multiple?

I. The macroeconomic approach would suggest that industries in which P/E ratios are lower than that of the market should be over weighted in a portfolio.
II. The microeconomic approach would suggest that the multiple would be higher for most industries during periods of rising interest rates.
III. The microeconomic approach would suggest that industries in which products have become dated will tend to exhibit lower P/E ratios.
IV. The P/E ratios will not be impacted when inflation is taken into account.

A) I and II only
B) II only
C) III and IV only
D) I, II and III only

. .

4) Which of the following are not technical points affecting the process of short selling?

A) The short seller must compensate the lender of the shares for any dividends that were paid during the period in which the shares were lend out.
B) Shares may only be sold short if the prevailing share price is higher than the equilibrium price of the previous trade.
C) A security may be sold short only if the investor isn't using borrowed funds in order to finance the trade.
D) The short seller must post a margin with his or her broker equal to an amount that would have been posted had these shares been bought on margin.

. .

5)	Which one of the following statements most accurately describes the competitive forces included in the Porter model? A) The Porter model only looks at factors that affect the rivalry within an industry. B) The Porter model focuses only on the strengths and weaknesses of the industry participants to determine how competitive the industry is. C) The Porter model basically focuses on the life cycle of the corporations in an industry to determine how competitive that industry is relative to other industries. D) The Porter model examines factors such as the threat of entry, rivalry among existing companies, substitute products, bargaining power of suppliers and the bargaining power of buyers.
	. .
6)	Which of the following is not likely to occur as a direct consequence of securities markets becoming more internationalized? A) Trading hours may be extended. B) Accounting standards will become more uniform and thus gain greater acceptance. C) Securities prices should become more stable as foreign restrictions are reduced. D) Trading volume should increase in second tier foreign securities markets.
	. .
7)	Which of the following statements least accurately describes the process of estimating the EPS for an industry? A) During economic rebounds, industries that traditionally employ higher levels of financial leverage will generally produce higher levels of EPS. B) During economic downturns, industries that traditionally employ higher levels of operating leverage will generally produce lower levels of EPS. C) Industries that have a higher degree of competition within will generally exhibit higher EPS values. D) It is possible for an industry EPS to decline during a period of economic recovery.
	. .
8)	XYZ Corporation has an outstanding preferred stock with a stated dividend of $2.25. The nominal risk-free rate of return is 5%, while the current inflation premium is 2%. If the credit spread on this issue is 3%, what should the current stock price of these preferred shares be? A) $45.00 B) $28.13 C) $75.00 D) $22.50
	. .
9)	The three firms in an industry have market shares of 22%, 49% and 29% respectively. What must be the equivalent number of same size firms that this industry represents? A) 2.68 B) 3.15 C) 4.02 D) 2.29
	. .
10)	Which of the following statements about primary and secondary markets is untrue? A) When an investor buys shares in the primary market, the proceeds go directly to the issuing corporation. B) Regardless of whether an investor buys a share in the primary market or a secondary market, the proceeds go to the company who is issuing the shares. C) When an investor buys shares in the secondary market, the proceeds go directly to the investor who previously owned the shares. D) The secondary market provides the necessary liquidity that enables companies to more easily sell their shares in the primary markets.
	. .

11)	Which of the following is not a component when determining the cost of equity? A) The expected rate of inflation B) The real yield on zero-coupon Treasury bonds in which maturity equates with the investor's investment horizon. C) Dividend payout ratio of the company D) The default risk of the particular issue
	. .
12)	Based on empirical research, which one of the following activities has created the most excess return for an international portfolio? A) Overweighing or underweighing exposure to particular exchange rates. B) Overweighing or underweighing specific industries. C) Overweighing or underweighing specific stocks. D) Overweighing or underweighing specific countries
	. .
13)	Which of the following events would generate a buy signal to an investor who employs a contrarian strategy? A) Cash position in equity mutual funds are at historic lows. B) Odd-lot short selling volume is unusually high relative to historic standards. C) Investor sentiment is extremely high. D) Premiums on call options are higher than usual.
	. .
14)	Which of the following statements is (are) true with respect to the basic forces that determine the competitiveness within an industry? I. Industries that require heavy initial expenditures will generally be comprised of firms that are relatively more profitable in the long run. II. Industries that are operating at high capacity utilization rates will tend to see a higher degree of rivalry among the member firms. III. Industries that tend to produce a commodity-like product will see a much higher degree of bargaining power from its customers. IV. Industries that enable its member firms to switch among vendors without incurring much cost will see a much higher degree of bargaining power from its suppliers. A) II and IV only B) II, III and IV only C) I and III only D) II only
	. .
15)	Which of the following statements is least accurate with respect to the factors that impact the price-to-earnings (P/E) multiple for a stock? A) The higher the market risk premium, the higher the P/E ratio will be. B) The lower the risk-free rate, the higher will be the P/E ratio. C) The higher the stock's beta, the lower the P/E ratio will be. D) The higher the growth rate in projected earnings, the higher the P/E ratio will be
	. .
16)	ABC Corp. has an earnings retention rate of 55% and an implied cost of equity that's 13%. If next year's earnings are projected to be $2.95 and is expected to grow at a constant rate of 8%, what do you expect to be ABC's forward looking P/E ratio? A) 9.0 times B) 16.4 times C) 13.2 times D) 20.0 times
	. .

17)	A portfolio manager is currently evaluating the attractiveness of ABC shares. In particular, ABC Corp. is expected to generate free cash flows of $1.75 in year one, $2.50 in year two, and $3.50 in year three. If the required rate of return on this stock is 13% and the manager strongly believes that these shares could be sold at a multiple of 14 times the estimated free cash flow at the end of year three, what would be a fair price for these shares today? A) $54.93 B) $33.96 C) $35.98 D) $39.89
	. .
18)	Which of the following is not a primary reason for a foreign firm to list its shares in exchanges of other countries? A) Draw upon a wider capital base, thus reduce its cost of equity B) To reduce the volatility of its underlying stock price C) To make itself a more difficult takeover target D) To increase its visibility among its customers and suppliers located in that particular nation
	. .
19)	In a highly efficient market, what do you expect the impact to be on the stock price of a corporation which announces an unexpected large increase in its dividend payments? A) An abnormal price decrease at the time of the announcement B) Actually, the stock price will decrease because it will indicate that the company no longer has any profitable opportunities to finance with its earned income. C) An abnormal price increase at the time of the announcement D) The stock price should not change because nothing has really changed within the company
	. .
20)	You observe a stock that has a risk premium of 5.5% and is expected to pay a dividend of $1.50 into perpetuity. Furthermore, Treasury bills are expected to yield 5% over the same period. What amount is the most that you would pay for this stock? A) $300.00 B) $30.00 C) $27.27 D) $14.29

Equity Income

1)	A	B	C	D	11)	A	B	C	D
2)	A	B	C	D	12)	A	B	C	D
3)	A	B	C	D	13)	A	B	C	D
4)	A	B	C	D	14)	A	B	C	D
5)	A	B	C	D	15)	A	B	C	D
6)	A	B	C	D	16)	A	B	C	D
7)	A	B	C	D	17)	A	B	C	D
8)	A	B	C	D	18)	A	B	C	D
9)	A	B	C	D	19)	A	B	C	D
10)	A	B	C	D	20)	A	B	C	D

Answers

1)	D	11)	C
2)	A	12)	D
3)	C	13)	B
4)	C	14)	C
5)	D	15)	A
6)	C	16)	A
7)	C	17)	D
8)	B	18)	B
9)	A	19)	C
10)	B	20)	D

Explanations

1) The correct answer is **D.**

Explanation: Margin refers to that portion of the account's market value that is deemed as the investor's equity. It may be written as:

$$\text{Margin} = \frac{\text{Market Value of Securities - Debt Balance}}{\text{Market Value of Margined Securities}}$$

. .

2) The correct answer is **A. Explanation:**

Step 1. Calculate cost of equity:

$$R_i = R_f + \beta_i(R_m - R_f)$$
$$= 4\% + (0.89)(10.5\% - 4\%)$$
$$= 9.785\%$$

Step 2. Calculate Intrinsic Value of Stock:

$$\frac{D_1}{k - g} = \frac{1.35(1.06)}{.09785 - .06} = \$37.81$$

Step 3. Relative valuation:

(i) Actual stock price:	38.50
(ii) Intrinsic value:	37.81
Overvaluation:	$0.69

. .

3) The correct answer is **C**

Explanation: Choice I is incorrect because the macroeconomic approach would suggest that industries whose current P/E ratios are lower than its normal P/E ratios relative to that of the market, should be overweighted in a portfolio. In other words, a low P/E in relation to the market would not justify overweighting the sector; only if this new low P/E is even lower than the normal relative low P/E that the industry has in relation to the market, would an overweighting be justified. II is incorrect because when interest rates rise, the required returns will also increase, causing the P/E multiple to drop. III is correct because for industries with dated or obsolete products, earnings will grow at a much slower rate. IV is correct because inflation affects the required return and the growth rate equally. Hence, the difference between the required return and the growth rate will always be the same regardless of whether we are using nominal or real figures

. .

4) The correct answer is **C**

Explanation: There is no borrowing involved in short selling. An investor is simply borrowing shares and then selling them immediately; thus no capital is required. The margin that is posted in order to facilitate a short sale may partly be financed from the sale of the borrowed shares

. .

5) The correct answer is **D.**

Explanation: In order to gauge the intensity of competition within an industry, the Porter model examines factors such as the threat of entry; rivalry among existing companies; substitute products; bargaining power of suppliers; and the bargaining power of buyers

6) The correct answer is **C.**

Explanation: Security price volatility will not be affected by the degree of internationalization in the market that they trade in. Instead, security price volatility is affected by many macro and micro factors.

7) The correct answer is **C.**

Explanation: Industries that have a higher degree of competition within will generally have firms with squeezed profit margins. Therefore, these types of industries would generally exhibit lower EPS values. Leverage, be it financial or operating, tends to magnify earnings (and thus EPS). Therefore, during economic expansion, leverage increases EPS and during contractions, leverage reduces EPS. You may recall from economics that inferior goods actually lose sales as income levels decline. Hence, industries that produce such goods should see declining EPS during economic expansions

8) The correct answer is **B.**

Explanation:

$$P_{XYZ} = \frac{\$2.25}{.08}$$

$$= \$28.13$$

Note that the discount rate is the sum of the risk free rate and the credit spread. The inflation premium is already built into the nominal risk free rate.

9) The correct answer is **A**

Explanation:

Step 1. Find the Herfindahl Index

$$\begin{aligned}\text{Herfindahl Index} &= (.22)^2 + (49)^2 + (.29)^2 \\ &= .0484 + .2401 + .0841 \\ &= 0.3726\end{aligned}$$

Step 2. The equivalent number of some-sized firms =

$$\frac{1}{\text{Herfindahl}}$$

$$= \frac{1}{.3726}$$

$$= 2.68$$

10) The correct answer is **B.**

Explanation: In reality, primary market and secondary market is really the same market. It's just that, if "new" shares are sold directly by an issuing company, we refer to the market as primary. However, once the issuer sells all its shares, the shares may then be traded among individual investors. Now, the market is referred to as secondary, even though it is the same market that the company sold its shares into. However, when a share is bought in the secondary market, the proceeds go to the individual who previously owned the stock and not the company who originally issued the shares. Liquidity in the secondary market enables companies to issue new shares without throwing off the balance between supply and demand for shares, which could seriously impair the amount of money that a company is trying to raise.

11)	The correct answer is **C** **Explanation:** Remember, the dividend payout ratio simply indicated how a company distributes its earnings. Therefore, what the size of the dividend payout ratio is should have no bearing on the earnings ability of the corporation
	. .
12)	The correct answer is **D.** **Explanation:** Despite popular belief, not all countries move in unison along the economic cycle. For instance, at any given point in time, some countries may be in the early part of a growth phase while other countries may just be heading into a recession. For this reason, choosing the right country to be invested in offers the greatest potential source of excess return. Industry movements, on the other hand, are highly correlated with the economy as a whole. For instance, during a recession, most industries within any economy will face a slowdown. Thus, industry selection will not have a strong as impact on excess return as country selection would.
	. .
13)	The correct answer is **B.** **Explanation:** Short selling is the process of borrowing shares so that they may be sold immediately and bought back at a later date at projected lower price. However, the act of buying back these shares at a later date creates an upward pressure on stock prices, hence the bullish signal. The "odd-lot" factor indicates that it's the smaller individual investors who are short selling; a fact that may indicate that short selling activity is reaching a relative low. Consequently, buyers must now be outnumbering sellers, a further bullish signal.
	. .
14)	The correct answer is **C** **Explanation:** Choice I is true because industries that require high initial capital expenditures, will deter new competitors from entering the industry; thus resulting in higher profitability in the future. II is incorrect because it is the industries which are operating at low capacity utilization rates which will tend to see a higher degree of rivalry among the member firms. The logic is that when products are moving slowly, manufacturers will become more eager to sell them. IV is incorrect because industries that enable its member firms to switch among vendors without incurring much costs will see a much lower degree of bargaining power from its suppliers. In other words, the member firms will have the advantage over their respective suppliers.
	. .
15)	The correct answer is **A.** **Explanation:** Therefore, the higher the market risk premium, the higher the required return will be, and thus the P/E ratio will be lower. Given $P_o = \frac{D_1}{k-g}$ by dividing both sides by E_1, we get the "forward" P/E ratio: $\frac{P_o}{E_1} = \frac{D_1/E_1}{k-g}$ But $k = R_F + \beta_i(R_m - R_F)$ as per CAPM Therefore k may increase as $R_F \uparrow$, $\beta_i \uparrow$, or $(R_m - R_F) \uparrow$
	. .

16) The correct answer is **A**.

Explanation:

Step 1. Compute the Stock Price: $P = \dfrac{D_1}{k - g}$

(i) Dividend = Earnings(1 − retention rate)

= 2.95(1 − .55)

= 1.3275

$\therefore P = \dfrac{1.3275}{.13 - .08} = 26.55$

Step 2. Compute P/E: $\dfrac{26.55}{2.95} = 9.0$ times

. .

17) The correct answer is **D**.

Explanation:

$$P_{ABC} = \frac{1.75}{(1.13)} + \frac{2.50}{(1.13)^2} + \frac{3.50}{(1.13)^3} + \frac{(3.50)(14)}{(1.13)^3}$$

$$= 1.549 + 1.958 + 2.426 + 33.96$$

$$= \$39.89$$

. .

18) The correct answer is **B.**

Explanation: A stock price will be influenced by many supply and demand factors. There is absolutely no direct link between listing a share in multiple markets and a reduction in its price volatility.

. .

19) The correct answer is **C.**

Explanation: Without information leakage, a big price change should not be expected before the announcement. However, in general, once a large dividend is made public, stock prices have generally increased dramatically at the point of announcement. The logic is that corporate profits must be improving dramatically for the board to have made such a large dividend announcement.

. .

20) The correct answer is **D.**

Explanation: One of the most often used tools to price a stock is the constant growth model. Hence, substituting all these variables in the equation gives us a value of $14.29 for the stock's price.

```
P(0)  = D(1)/(k-g)
Where P(0) is the price of the security today
      D(1) is the dividend expected one year from now
        K  is the required rate of return for that particular security
        G  is the growth rate of the dividends

In this case:

D(1) is $1.50,
G=0, since there is no growth in dividends, and
k can be derived as follows:
  We know that the risk premium or (k-Rf)= 5.5%, we also know that Rf=5%,
  Therefore, substituting Rf in the risk premium equation gives us:
  K - 5% = 5.5%
  K = 10.5%
```