Student name:\_\_\_\_\_\_\_\_\_\_

**MULTIPLE CHOICE - Choose the one alternative that best completes the statement or answers the question.  
1)** Which of the following statements *best* describes the overreaction effect?

1) \_\_\_\_\_\_

A) Low returns over a three-year period are followed by high returns over the following three years.   
 B) High returns over a one-year period are followed by low returns over the following three years.  
 C) High returns over a one-year period are followed by high returns over the following year.

**2)** Equal weighting is the most common weighting methodology for indexes of which of the following types of assets?

2) \_\_\_\_\_\_

A) Hedge funds.   
 B) Equities.  
 C) Fixed income securities.

**3)** Which of the following option positions is said to be a long position?

3) \_\_\_\_\_\_

A) Writer of a put option.   
 B) Buyer of a put option.  
 C) Writer of a call option.

**4)** An investor bought a stock on margin. The margin requirement was 60%, the current price of the stock is $80, and the stock price was $50 one year ago. If margin interest is 5%, how much equity did the investor have in the investment at year-end?

4) \_\_\_\_\_\_

A) 73.8%.   
 B) 60.6%.  
 C) 67.7%.

**5)** Peg Fisk, CFA, states that two of the objectives of market regulation which CFA Institute attempts to address are minimum standards of competence among investment professionals and ease of performance evaluation for investors. Fisk is accurate with regard to:

5) \_\_\_\_\_\_

A) only one of these objectives   
 B) both of these objectives.  
 C) neither of these objectives.

**6)** The idea that uninformed traders, when faced with unclear information, observe the actions of informed traders to make decisions, is referred to as:

6) \_\_\_\_\_\_

A) narrow framing.   
 B) herding behavior.  
 C) information cascades.

**7)** Which of the following statements *least likely* describes the role of a portfolio manager in perfectly efficient markets? Portfolio managers should:

7) \_\_\_\_\_\_

A) quantify client's risk tolerance, communicate portfolio policies and strategies, and maintain a strict buy and hold policy avoiding any changes in the portfolio to minimize transaction costs.   
 B) construct diversified portfolios that include international securities to eliminate unsystematic risk.  
 C) construct a portfolio that includes financial and real assets.

**8)** Which of the following conditions is *most likely* necessary for capital to be allocated to its most valuable uses?

8) \_\_\_\_\_\_

A) There are no barriers to the flow of complete information to the financial markets.   
 B) Investors are well informed about the risk and return of various investments.  
 C) Financial markets are frictionless (i.e., free of taxes or transactions costs).

**9)** The value of a total return index:

9) \_\_\_\_\_\_

A) may increase at either a faster or slower rate than the value of a price return index with the same constituent securities and weights.   
 B) can be calculated by multiplying the beginning value by the geometrically linked series of periodic total returns.  
 C) is determined by the price changes of the securities that constitute the index.

**10)** Which of the following statements about indexes is CORRECT?

10) \_\_\_\_\_\_

A) An equal weighted index assumes a proportionate market value investment in each company in the index.   
 B) A market weighted series must adjust the denominator to reflect stock splits in the sample over time.  
 C) A price-weighted index assumes an equal number of shares (one of each stock) represented in the index.

**11)** If the momentum effect persists over time, it would provide evidence against which of the following forms of market efficiency?

11) \_\_\_\_\_\_

A) Weak form only.   
 B) Both weak form and semi strong form.  
 C) Semi strong form only.

**12)** Which of the following statements concerning market efficiency is *least* accurate?

12) \_\_\_\_\_\_

A) Tests of the semi-strong form of the EMH require that security returns be risk-adjusted using a market model.   
 B) Market efficiency assumes that individual market participants correctly estimate asset prices.  
 C) If weak-form market efficiency holds, technical analysis cannot be used to earn abnormal returns over the long-run.

**13)** An analyst with Guffman Investments has developed a stock selection model based on earnings announcements made by companies with high P/E stocks. The model predicts that investing in companies with P/E ratios twice that of their industry average that make positive earnings announcements will generate significant excess return. If the analyst has consistently made superior risk-adjusted returns using this strategy, which form of the efficient market hypothesis has been violated?

13) \_\_\_\_\_\_

A) Strong, semi strong, and weak forms.   
 B) Weak form only.  
 C) Semi strong and strong forms only.

**14)** A stock's price currently is $100. An analyst forecasts the following for the stock:  
 ● The normalized trailing price earnings (P/E) ratio will be 12×.  
 ● The stock is expected to pay a $5 dividend this coming year on projected earnings of $10 per share.  
   
 If the analyst were to buy and hold the stock for the year, the projected rate of return based on these forecasts is *closest* to:

14) \_\_\_\_\_\_

A) 15%.   
 B) 25%.  
 C) 20%.

**15)** A firm has a constant growth rate of 7% and just paid a dividend of $6.25. If the required rate of return is 12%, what will the stock sell for two years from now based on the dividend discount model?

15) \_\_\_\_\_\_

A) $133.75.   
 B) $149.80.  
 C) $153.13.

**16)** Which of the following industries is *most likely* to operate in a fragmented market?

16) \_\_\_\_\_\_

A) Pharmaceuticals.   
 B) Oil services.  
 C) Confections.

**17)** When constructing a peer group of firms, an analyst should *least* appropriately consider the firms’:

17) \_\_\_\_\_\_

A) industry classification.   
 B) cost structures.  
 C) business cycle sensitivity.

**18)** In a period when U.S. equity prices are increasing and the U.S. dollar is depreciating, which of the following investors in U.S. equities is *most likely* to earn the highest return in the investor's local currency?

18) \_\_\_\_\_\_

A) U.S. investor who reinvests dividends.   
 B) Non-U.S. investor who reinvests dividends.  
 C) Non-U.S. investor who does not reinvest dividends.

**19)** Assume a company has earnings per share of $5 and pays out 40% in dividends. The earnings growth rate for the next 3 years will be 20%. At the end of the third year the company will start paying out 100% of earnings in dividends and earnings will increase at an annual rate of 5% thereafter. If a 12% rate of return is required, the value of the company is *closest* to:

19) \_\_\_\_\_\_

A) $102.80.   
 B) $92.90.  
 C) $55.70.

**20)** Given the following estimated financial results for the next period, value the stock of FishnChips, Incorporated, using the infinite period dividend discount model (DDM).  
 ● Sales of $1,000,000.  
 ● Earnings of $150,000.  
 ● Total assets of $800,000.  
 ● Equity of $400,000.  
 ● Dividend payout ratio of 60.0%.  
 ● Average shares outstanding of 75,000.  
 ● Real risk free interest rate of 4.0%.  
 ● Expected inflation rate of 3.0%.  
 ● Expected market return of 13.0%.  
 ● Stock Beta at 2.1.  
   
 The per share value of FishnChips stock is approximately: *(Note: Carry calculations out to at least 3 decimal places.)*

20) \_\_\_\_\_\_

A) $17.91.   
 B) $26.86.  
 C) $30.89.

**21)** Because of dividend displacement of earnings, the net effect on firm value of increasing the dividend payout ratio is:

21) \_\_\_\_\_\_

A) to increase firm value.   
 B) indeterminate.  
 C) to decrease firm value.

**22)** The experience curve, which illustrates the cost per unit relative to output:

22) \_\_\_\_\_\_

A) slopes upward.   
 B) slopes downward.  
 C) slopes upward in the early years and downward in the later years.

**23)** Which of the following is *least likely* a reason the price to cash flow (P/CF) model has grown in popularity?

23) \_\_\_\_\_\_

A) CFs are used extensively in valuation models.   
 B) CFs are more easily estimated than future dividends.  
 C) CFs are generally more difficult to manipulate than earnings. CFs are not easier to estimate than dividends.

**24)** Declining prices that result from the development of substitute products are *most likely* to characterize an industry in the:

24) \_\_\_\_\_\_

A) shakeout stage.   
 B) mature stage.  
 C) decline stage.

**25)** Use the following information and the multi-period dividend discount model to find the value of Computech’s common stock.  
 ● Last year’s dividend was $1.62.  
 ● The dividend is expected to grow at 12% for three years.  
 ● The growth rate of dividends after three years is expected to stabilize at 4%.  
 ● The required return for Computech’s common stock is 15%.  
   
 Which of the following statements about Computech's stock is *least* accurate?

25) \_\_\_\_\_\_

A) At the end of two years, Computech's stock will sell for $20.69.   
 B) The dividend at the end of year three is expected to be $2.28.  
 C) Computech's stock is currently worth $17.46.

**26)** What value would be placed on a stock that currently pays no dividend but is expected to start paying a $1 dividend five years from now? Once the stock starts paying dividends, the dividend is expected to grow at a 5 percent annual rate. The appropriate discount rate is 12 percent.

26) \_\_\_\_\_\_

A) $9.08.   
 B) $14.29.  
 C) $8.11.

**27)** Which of the following is *least likely* an advantage of using price/sales (P/S) multiple?

27) \_\_\_\_\_\_

A) P/S multiples provide a meaningful framework for evaluating distressed firms.   
 B) P/S multiples are not as volatile as P/E multiples and hence may be more reliable in valuation analysis.  
 C) P/S multiples are more reliable because sales data cannot be distorted by management.

**28)** Industry analysis is *most likely* to provide an analyst with insight about a company's:

28) \_\_\_\_\_\_

A) pricing power.   
 B) financial performance.  
 C) competitive strategy.

**29)** Yong Kim, CFA, buys a preferred stock that has a 6% dividend yield (defined as the ratio of the preferred dividend to the market price of the preferred stock). One year later, Kim sells the stock when it is selling at a 5% dividend yield. The preferred stock pays a fixed annual dividend, which Kim received right before selling. What rate of return did Kim realize on his investment?

29) \_\_\_\_\_\_

A) 26%.   
 B) 14%.  
 C) 20%.

**30)** A conglomerate is in the following lines of business, with segment revenue as a percentage of total revenue: 30% banking, 30% automobiles, 25% apparel, and 15% heavy machinery. Based on the Global Industry Classification Standard, the sector classification for this company is *most likely*:

30) \_\_\_\_\_\_

A) industrials.   
 B) financial services.  
 C) consumer discretionary.

**Answer Key**Test name: Equity Investments

1) A

The overreaction effect refers to stocks with poor returns over three to five-year periods that had higher subsequent performance than stocks with high returns in the prior period. The result is attributed to overreaction in stock prices that reverses over longer periods of time. Stocks with high previous short- term returns that have high subsequent returns show a momentum effect.

2) A

Most hedge fund indexes are equal-weighted. Equity and fixed income indexes are predominately market capitalization weighted.

3) B

The buyer of an option (either a call or put) is said to be long the option and the writer of an option is said to be short the option. Note that with put options, the long (put option holder) benefits when the price of the underlying asset decreases, while the short (put option writer) benefits when the price of the underlying asset increases. We say that a put buyer is long the option but has short exposure to the underlying asset price.

4) A

Margin debt = 40% × $50 = $20; Interest = $20 × 0.05 = $1.  
 Equity % = [Value − (margin debt + interest)] / Value  
   
 $80 − $21 / $80 = 73.8%

5) B

CFA Institute attempts to address both of these objectives of market regulation. The CFA Program is part of the effort to encourage minimum standards of competency among finance professionals. Global Investment Performance Standards are part of the effort to make performance evaluation easier for investors.

6) C

“Information cascades” refers to uninformed traders watching the actions of informed traders when making investment decisions. Herding behavior is when trading occurs in clusters, not necessarily driven by information. Narrow framing refers to investors viewing events in isolation.

7) A

A portfolio manager should quantify each client's risk tolerance and communicate portfolio policies and strategies. However, portfolio managers should monitor client's needs and changing circumstances and make appropriate changes to the portfolio. Adhering to a strict buy and hold policy would not be in the client's best interest. Portfolios need to be rebalanced and changed to meet client’s changing needs.

8) B

Capital will flow to its most valuable uses if markets function well and investors are well informed about the risk and return characteristics of various investments. Allocation of capital to its most valuable uses does not require that all investors have complete information or that financial markets are frictionless.

9) B

The value of a total return index can be calculated by multiplying the beginning value by the geometrically linked series of index total returns. The value of a total return index includes both the price changes of the securities that constitute the index and any cash flows from the securities (dividends, interest, and other distributions). A total return index cannot increase at a slower rate (or decrease at a faster rate) than an otherwise identical price return index because cash flows from the securities cannot be negative.

10) C

The descriptions of value weighted and unweighted indexes are switched. The denominator of a price- weighted index must be adjusted to reflect stock splits and changes in the sample over time. A market value-weighted series assumes you make a proportionate market value investment in each company in the index.

11) B

The momentum effect suggests it is possible to earn abnormal returns using market data. All three forms of market efficiency (weak form, semi strong form, and strong form) assume that market prices fully reflect market data.

12) B

Market efficiency does not assume that individual market participants correctly estimate asset prices, but does assume that their estimates are unbiased. That is, some agents will over-estimate and some will under-estimate, but they will be correct, on average.

13) C

The semi strong form of EMH states that security prices rapidly adjust to reflect all publicly available information. If the analyst can use his model, which is based on publicly available information, to earn above average returns, the semi strong form of the EMH has been violated. If the semi strong form of EMH is violated, the strong form of EMH is also violated.

14) B

The forecast year-end price, *P*, is:  
   
 P = EPS × (P/E) = 10(12) = 120  
   
formula1.mml  
   
   
   
formula2.mml  
formula4.mml

15) C

formula3.mml

16) B

Most areas of the oil services industry are characterized by many small competitors. The confections and pharmaceutical industries each have a small number of very large firms.

17) C

A peer group should consist of firms that are alike in their principal lines of business, along with other similarities such as cost structures and access to capital. Firms can be similar in business cycle sensitivity but dissimilar in terms of their business activities (e.g., a firm in the home building industry and a firm in the heavy equipment manufacturing industry).

18) A

Sources of return on equity securities include price appreciation or depreciation, dividend income, and foreign exchange gains or losses for investors outside the country. In an increasing equity market, reinvesting dividends is likely to increase returns compared to not reinvesting dividends. If the currency is depreciating, investors from outside the country will experience foreign exchange losses that decrease their returns.

19) A

First, calculate the dividends in years 0 through 3: (We need D3 to calculate the value in Year 2)   
   
 D0 = (0.4)(5) = 2   
   
 D1 = (2)(1.2) = 2.40   
   
 D2 = (2.4)(1.2) = 2.88   
   
 D 3 = E 3 = 5(1.2) 3 = 8.64   
   
 Because D3 will grow at a constant rate, we can use it to estimate a terminal value for the stock at t = 2:   
   
 P2 = D3 / (k − g) = 8.64 / (0.12 − 0.05) = $123.43   
   
 Present value of the cash flows = value of stock = 2.4 / (1.12)1 + 2.88 / (1.12)2 + 123.43 / (1.12)2 = 102.83

20) B

Here, we are given all the inputs we need. Use the following steps to calculate the value of the stock:   
   
 *First*, expand the infinite period DDM:   
   
 DDM formula: P0 = D1 / (ke − g)   
   
 D1 = (Earnings × Payout ratio) / average number of shares outstanding   
   
 = ($150,000 × 0.60) / 75,000 = $1.20   
   
 ke = nominal risk free rate + [beta × (expected market return − nominal risk free rate)]   
   
 *Note:* Nominal risk-free rate   
   
 = (1 + real risk free rate) × (1 + expected inflation) − 1   
   
 = (1.04) × (1.03) − 1 = 0.0712, or 7.12%.   
   
 ke = 7.12% + [2.1 × (13.0% – 7.12%)] = 0.19468   
   
 g = (retention rate × ROE)   
   
 Retention = (1 − Payout) = 1 − 0.60 = 0.40.   
   
 ROE = (net income / sales)(sales / total assets)(total assets / equity)   
   
 = (150,000 / 1,000,000)(1,000,000 / 800,000)(800,000 / 400,000)   
   
 = 0.375   
   
 g = 0.375 × 0.40 = 0.15   
   
 *Then*, calculate: P0 = D1 / (ke − g) = $1.20 / (0.19468 − 0.15) = **26.86.**

21) B

The net effect on firm value of increasing the dividend payout ratio is ambiguous because the positive effect of larger dividends may be offset by a negative effect on the firm's sustainable growth rate. If increasing the payout ratio always increased firm value, all firms would have 100% payout ratios.

22) B

The experience curve, which shows the cost per unit relative to output, slopes downward because of increases in productivity and economies of scale, especially in industries with high fixed costs.

23) B

24) C

The decline stage of the industry life cycle is often characterized by declining prices as substitute products or global competition emerge, or as a result of decreasing demand due to societal changes.

25) C

The dividends for years 1, 2, and 3 are expected to be ($1.62)(1.12) = $1.81; ($1.81)(1.12) = $2.03; and ($2.03)(1.12) = $2.27. At the end of year 2, the stock should sell for $2.27 / (0.15 − 0.04) = $20.64. The stock should sell currently for ($20.64 + $2.03) / (1.15)2 + ($1.81) / (1.15) = $18.71.

26) A

P 4 = D5/(k − g) = 1/(.12 − .05) = 14.29   
   
 P 0 = [FV = 14.29; n = 4; i = 12] = $9.08.

27) C

Accounting data on sales is used to calculate the P/S multiple. The P/S multiple is thought to be more reliable because sales figures are not as easy to manipulate as the earnings and book value, both of which are significantly affected by accounting conventions. However, it is not true that "sales data cannot be distorted by management" because aggressive revenue recognition practices can influence reported sales.

28) A

Industry analysis provides a framework for an analyst to understand a firm in relation to its competitive environment, which determines how much pricing power a firm has. Competitive strategy and financial performance are aspects of company analysis.

29) A

The dividend can be of any size. Suppose it is $1.00.   
   
 The purchase price is 1.00 / 0.06 = 16.667.   
   
 The sale price is 1.00 / 0.05 = 20.   
   
 Kim pays 16.667 and receives 20.00 plus a 1.00 dividend one year later. The rate of return is [(20 + 1) / 16.667] − 1 = 26%.

30) C

Automobiles and apparel are classified as consumer discretionary; banking is classified as financial services; and heavy machinery is classified as industrials. Based on revenues, a majority of the firm’s sales (55%) are derived from the consumer discretionary sector.