

Level 1 Mock Exam_Part 1 答案详细解答

1、 Which of the following is a key characteristic of the Global Investment Performance Standards (GIPS)? The GIPS standards:

Select exactly 1 answer(s) from the following:

- A. rely on the integrity of input data.
- B. address every aspect of performance measurement.
- C. consist of required provisions for firms to follow to achieve best practice.
- D. must be applied with the goal of achieving excellence in performance presentation.

1 Correct answer is **A**

Global Investment Performance Standards (GIPS) 2008 Modular Level I, Vol. 1, pp. 127-128 Study Session 1-4-a describe the key characteristics of the GIPS standards and the fundamentals of compliance A key characteristic of the Standards is that the Standards rely on the integrity of input data. The accuracy of input data is critical to the accuracy of the performance presentation.

2、 According to the Standards of Practice Handbook, a member who is an investment manager is most likely to breach his duty to clients by:

Select exactly 1 answer(s) from the following:

- A. disclosing potential conflicts of interest.
- B. habitually voting with management on proxies that relate to non-routine governance issues.
- C. disclosing confidential client information to the CFA Institute Professional Conduct Program.
- D. using client brokerage to purchase goods or services that are used in the investment decision-making process.

2 Correct answer is **B**

Guidance for Standards I-VII, Standards of Practice Handbook 2008 Modular Level I, Vol. 1, p. 50 Study Session 1-2-a demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct A fiduciary who votes blindly with management on non-routine governance issues may breach their duty to clients by violating the standard that relates to loyalty, prudence, and care.

3、 Carla Scott, CFA, is a portfolio manager for a company that manages investment accounts for wealthy individuals. Scott has no beneficial interest in any of the fee-paying accounts she manages, including her uncle's account. When shares in initial public offerings (IPOs) become available, Scott first allocates shares to all her other clients for whom the investment is appropriate; only if shares are still available does she purchase shares in her uncle's account, if the issue is appropriate for him. Scott provides each of her clients with full disclosure of her allocation procedures and has received each client's verbal consent to her allocation procedures. According to the Standards of Practice Handbook, does Scott's method of allocating oversubscribed IPOs violate any CFA Institute Standards of Professional Conduct?

Select exactly 1 answer(s) from the following:

- A. No.
- B. Yes, because she has breached her duty to her uncle.
- C. Yes, because she has failed to obtain written consent with respect to her allocation procedures.
- D. Yes, because her allocation procedures contribute to market manipulation of initial public offerings.

3 Correct answer is **B**

Guidance for Standards I-VII, Standards of Practice Handbook 2008 Modular Level I, Vol. 1, pp. 50-55, 94-95, 98, Example 3 Study Session 1-2-a demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct B is correct because Scott's method of allocating oversubscribed IPOs discriminates against her uncle, who is a fee-paying client; she violates the Standard related to Fair Dealing. Family accounts that are fee-paying client accounts should be treated like any other firm account. They should neither receive special treatment nor be disadvantaged because of an existing family relationship.

- 4、 Kim Li, CFA, is a portfolio manager for an investment advisory firm. Li delegates some of her supervisory duties to Janet Marshall, CFA, after educating Marshall on methods to prevent and detect violations of the firm's compliance procedures. Despite these efforts, Li discovers that an employee reporting to Marshall may have violated the law. According to the Standards of Practice Handbook, Li's initial course of action must be to:

Select exactly 1 answer(s) from the following:

- A. suspend the employee.
- B. suspend Marshall from her supervisory duties.
- C. initiate an investigation to determine the extent of the wrongdoing.
- D. demand that the employee involved provide assurances that the activity will not be repeated.

4 Correct answer is C

Guidance for Standards I-VII, Standards of Practice Handbook 2008 Modular Level I, Vol. 1, pp. 76-79 Study Session 1-2-a demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct A supervisor may delegate supervisory responsibilities, but such delegation does not relieve them of their supervisory responsibility; Li must immediately begin an investigation of the matter to ascertain the extent of the wrongdoing. Relying on assurances from the employee or simply reporting the misconduct up the chain of command are not enough.

- 5、 Marcus Takeda, CFA, is an analyst at a small investment advisory firm. His firm routinely purchases third-party research that Takeda has found to be sound and reliable. Takeda drafts a research report recommending the purchase of Crozet Corporation common stock to clients for whom the investment is suitable. The report contains financial projections from third-party research providers referenced by Takeda. Takeda writes, "This recommendation is based on expectations for continued strong demand for Crozet's products." Finally, Takeda notes at the end of the report that he owns Crozet Corporation convertible bonds. According to the *Standards of Practice Handbook*, has Takeda violated the CFA Institute Standard of Professional Conduct relating to:

	<u>reasonable basis?</u>	<u>independence and objectivity?</u>
A.	No	No
B.	No	Yes
C.	Yes	No
D.	Yes	Yes

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

5 Correct answer is D

Guidance for Standards I-VII, Standards of Practice Handbook
2008 Modular Level I, Vol. I, pp. 21-23, 29-31, 80-82

Study Session 1-2-b

distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and the Standards

Takeda may rely on and issue reports based on third-party research providers if he has no reason to question the soundness or reliability of their research and he appropriately references his sources. He also appropriately discloses his interest in the company.

- 6、 David Gunard, CFA, is an equity analyst at Curry Securities. He receives an assignment to analyze Enterloch Corporation, a stock owned by several of Curry's clients. Gunard completes a thorough, fundamental analysis of Enterloch. Given his analysis and the sharp rise in the company's stock price during the past year, Gunard concludes that the shares are substantially overvalued. After the report is approved by Gunard's supervisor, but prior to the release

of the report, Gunard calls his father to suggest that he sell his Enterloch shares immediately. Gunard's father informs him that he has already disposed of his holdings in Enterloch. According to the *Standards of Practice Handbook*, has Gunard violated the CFA Institute Standards of Professional Conduct relating to:

	<u>duties to clients?</u>	<u>reasonable basis?</u>
A.	No	No
B.	No	Yes
C.	Yes	No
D.	Yes	Yes

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

6 Correct answer is C

Guidance for Standards I-VII, Standards of Practice Handbook

2008 Modular Level I, Vol. 1, pp. 48-51, 53-58, 80-82

Study Session 1-2-b

distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and the Standards

By communicating this information to his father prior to release of the report, Gunard failed to put the firm’s clients’ interests above his own. Nothing in the question indicates that he did not have a reasonable basis for his recommendation; he conducted a thorough fundamental analysis and his report was approved. The fact that Gunard’s father had already disposed of the shares does not negate the fact that Gunard violated a duty to the firm’s clients.

7、According to the *Standards of Practice Handbook*, may a member who inadvertently learns about an unannounced tender offer:

	<u>trade on the information?</u>	cause others to trade on the <u>information?</u>
A.	No	No
B.	No	Yes
C.	Yes	No
D.	Yes	Yes

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

7 Correct answer is A

Guidance for Standards I-VII, Standards of Practice Handbook

2008 Modular Level I, Vol. 1, pp. 36-39

Study Sessions 1-1-c, 1-2-b

explain the ethical responsibilities required by the Code and Standards, including the multiple subsections of each Standard;

distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and the Standards

A member in possession of material nonpublic information that could affect the value of an investment may not act or cause others to act on the information.

- 8、 According to the *Standards of Practice Handbook*, do candidates violate the CFA Institute Standards of Professional Conduct by cheating on:

	the CFA <u>examination</u> ?	any other <u>examination</u> ?
A.	No	No
B.	No	Yes
C.	Yes	No
D.	Yes	Yes

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

8 Correct answer is **D**

Guidance for Standards I-VII, Standards of Practice Handbook

2008 Modular Level I, Vol. 1, p. 101

Study Sessions 1-1-c, 1-2-b

explain the ethical responsibilities required by the Code and Standards, including the multiple subsections of each Standard;

distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and the Standards

Conduct covered and prohibited under Standard VII (A) includes cheating on the CFA examination or any other examination.

- 9、 According to the *Standards of Practice Handbook*, a member who copies employer records in violation of the employer's policies may violate CFA Institute Standards unless the member's clear intent is to protect:

Select exactly 1 answer(s) from the following:

- A. clients.
- B. colleagues.
- C. his reputation.
- D. the employer's reputation.

9 Correct answer is **A**

Guidance for Standards I-VII, Standards of Practice Handbook

2008 Modular Level I, Vol. 1, p. 71

Study Sessions 1-1-c, 1-2-b

explain the ethical responsibilities required by the Code and Standards, including the multiple subsections of each Standard;

distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and the Standards

Activities that would normally violate a member's duty to his employer (such as copying employer records) may be justified. Such action would be permitted only if the intent is clearly aimed at protecting clients or the integrity of the market and not for personal gain.

10 Buta Singh, CFA, has a large extended family and manages the portfolios of several family members. Singh does not charge the family members a management fee, but receives a small percentage of each portfolio's profits. Singh accepts a position as portfolio manager for Bhotmange Investments to manage high net worth accounts. Because the family portfolios are not normal client relationships, Singh does not inform his new employer of his side activity. With respect to the family portfolios, does Singh violate any CFA Institute Standards of Professional Conduct?

Select exactly 1 answer(s) from the following:

- A. No.
- B. Yes, because he failed to obtain consent from his employer.
- C. Yes, because he failed to disclose his new employment to his existing clients.
- D. Yes, because he violated his duty to his employer by not requiring his relatives to transfer their accounts to his new employer.

10 Correct answer is **B**

Standards of Practice Handbook, 9th edition (CFA Institute, 2005), pp. 83-85, 91

Standards I-VII

2008 Modular Level I, Vol. 1, pp. 69-71, 75

Study Session 1-2-a

demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct

Members who plan to engage in independent practice for compensation should not render services until receiving written consent from their employer.

11 Meryl Mamet, CFA, manages an emerging markets fund which has generated annual returns of 30% for the past three years. Mamet distributes a marketing brochure which includes the following statement "My investment expertise has generated annual returns of 30% for the past three years and you can expect a similar rate of growth over the next two years." Does Mamet violate any CFA Institute Standards?

Select exactly 1 answer(s) from the following:

- A. No.
- B. Yes, because the performance should be stated net of fees.
- C. Yes, because the returns must include terminated accounts.
- D. Yes, because the presentation makes assurances regarding investment performance.

11 Correct answer is **D**

Standards of Practice Handbook, 9th edition (CFA Institute, 2005), pp. 75-76

2008 Modular Level I, Vol. 1, pp. 64-65

Study Session 1-2-a

demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct

Members must not knowingly make statements of assurances or guarantees regarding an investment.

12 Crandall Temasek, CFA, filed for personal bankruptcy two years ago after incurring large medical expenses. He was hired recently as a portfolio manager. According to the CFA Institute Standards, must Temasek disclose his bankruptcy filing to his new employer?

Select exactly 1 answer(s) from the following:

- A. No.
- B. Yes, because he has a duty of loyalty to his employer.
- C. Yes, because bankruptcy represents a potential conflict of interest.

D. Yes, because bankruptcy reflects poorly on his conduct and character.

12 Correct answer is **A**

Standards of Practice Handbook, 9th edition (CFA Institute, 2005), p. 33

Standards I-VII

2008 Modular Level I, Vol. 1, p. 35

Study Session 1-2-a

demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct

Members who are involved in a personal bankruptcy filing are not automatically assumed to be in violation of the standards because bankruptcy may not reflect poorly on the integrity or trustworthiness of the person involved.

13 Sallie Lewis, CFA, is a research analyst covering the mining industry. Along with other analysts, Lewis visits the primary mine of Gold Rush Mines (GR). During the visit, a major piece of equipment fails and Lewis overhears an unidentified employee state that production will be stalled for six months. Lewis immediately files a sell recommendation on GR without any additional research. Has Lewis violated any CFA Institute Standards?

Select exactly 1 answer(s) from the following:

- A. No.
- B. Yes, with respect to client confidentiality.
- C. Yes, with respect to diligence and reasonable basis.
- D. Yes, with respect to material nonpublic information.

13 Correct answer is **C**

Standards of Practice Handbook, 9th edition (CFA Institute, 2005), pp. 37-40

Standards I-VII

2008 Modular Level I, Vol. 1, pp. 36-39

Study Session 1-2-a

demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct

Lewis must investigate the reliability of the information before making an investment recommendation based on the information.

14 Clive Bowers, CFA, is a portfolio manager at Burlington Advisors (BA). Bowers manages two mutual funds along with a number of individual accounts. All of the portfolios, including the mutual funds, have similar return objectives, risk tolerances, and tax constraints. When Bowers allocates shares from block trades he fills the mutual fund orders first and then allocates the remaining shares to the individual accounts based on their portfolio size. When allocating shares from block trades, does Bowers violate any CFA Institute Standards?

Select exactly 1 answer(s) from the following:

- A. No.
- B. Yes, with respect to suitability.
- C. Yes, with respect to fair dealing.
- D. Yes, with respect to priority of transaction.

14 Correct answer is **C**

Standards of Practice Handbook, 9th edition (CFA Institute, 2005), pp. 61-63

Standards I-VII

2008 Modular Level I, Vol. 1, pp. 53-55

Study Session 1-2-a

demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct

Members must deal fairly and objectively with clients when taking investment actions for them. By treating the mutual funds more favorably than the individual portfolios, Owens violates the standard relating to fair dealing.

15 Narupa Rhasta, CFA, is manager of the fast-growing individual account division of a bank and treats all clients equally. When the bank's research department issues a buy or sell recommendation on a security, she ensures that the recommended action is implemented in all accounts. Do Rhasta's investment actions violate any CFA Institute Standards?

Select exactly 1 answer(s) from the following:

- A. No.
- B. Yes, with respect to suitability.
- C. Yes, with respect to fair dealing.
- D. Yes, with respect to diligence and a reasonable basis.

15 Correct answer is C

Standards of Practice Handbook, 9th edition (CFA Institute, 2005), pp. 69-71

Standards I-VII

2008 Modular Level I, Vol. 1, pp. 60-62

Study Session 1-2-a

demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct

Members must consider the needs, circumstances and objectives of clients when taking investment action for their accounts. By treating all accounts as if they were the same, Rhasta failed to consider the uniqueness of each client's circumstances.

16 Jimmy Lee, CFA, is an investment banker in a country with strict confidentiality laws. He is working on an acquisition for Panda Mining Co. (PMC). While performing due diligence, Lee notices that PMC has a number of questionable offshore partnerships. He investigates the legality of the partnerships and finds evidence of illegal activity. According to the Standards of Professional Conduct, Lee's best course of action would be to:

Select exactly 1 answer(s) from the following:

- A. tip the media.
- B. alert CFA Institute.
- C. consult outside counsel.
- D. notify regulatory authorities.

16 Correct answer is C

Standards of Practice Handbook, 9th edition (CFA Institute, 2005), pp. 79-80

Standards I-VII

2008 Modular Level I, Vol. 1, pp. 67-68

Study Session 1-2-a

demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct

Members must keep client information confidential and must comply with applicable law. If applicable law requires disclosure of client information in certain circumstances, members and candidates must comply with the law. If applicable law requires members to maintain confidentiality, even if the information concerns illegal activities on the part of the client, members should not disclose such information. Lee's best course of action would be to consult with outside counsel to determine applicable law.

17、 Rene Whatcom, CFA, is an independent contractor who writes research reports for several investment publications. Whatcom refuses to sign contracts with exclusivity clauses. Whatcom sometimes revises work he submits to one publication and sends slightly altered versions of the report to additional publications. Does Whatcom violate any CFA Institute Standards?

Select exactly 1 answer(s) from the following:

- A. No.
- B. Yes, with respect to loyalty.
- C. Yes, with respect to disclosure of conflicts.
- D. Yes, with respect to additional compensation.

17 Correct answer is **A**

Standards of Practice Handbook, 9th edition (CFA Institute, 2005), pp. 83-85

Standards I-VII

2008 Modular Level I, Vol. 1, pp. 69-71

Study Session 1-2-a

demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct

A member's duties within an independent contractor relationship are governed by the oral or written agreement between the member and the client. Members should take care to define clearly the scope of the responsibilities and the expectations of each client within the context of each relationship. Members have a duty to abide by the terms of the agreement.

18、 Angus Draper, CFA, is a senior portfolio manager and member of the investment committee at Tillahook Investments. Draper serves as a board member for several non-profit organizations. These commitments require eight workdays per month of Draper's time. Because he does not receive any form of compensation for these activities, Draper does not tell anyone at work about his board activities. Does Draper violate any CFA Institute Standards?

Select exactly 1 answer(s) from the following:

- A. No.
- B. Yes, with respect to conflict of interest.
- C. Yes, with respect to additional compensation.
- D. Yes, with respect to responsibilities of supervisors.

18 Correct answer is **B**

Standards of Practice Handbook, 9th edition (CFA Institute, 2005), pp 83-85, 113-115

Standards I-VII

2008 Modular Level I, Vol. 1, pp. 69-71, 89-91

Study Session 1-2-a

demonstrate a thorough knowledge of the Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations presenting multiple issues of questionable professional conduct

Members must make full and fair disclosure of all matters that could reasonably be expected to impair their independence and objectivity or interfere with respective duties. Draper should discuss his outside activities with his employer and come to mutual agreement regarding how to manage his personal commitments with his responsibilities to his employer.

19、 The yield to maturity on otherwise identical option-free bonds issued by the U.S. Treasury and General Motors is 6% and 8%, respectively. If annual inflation is expected to remain steady at 2.5% over the life of the bonds, the most likely explanation for the difference in yields is:

Select exactly 1 answer(s) from the following:

- A. liquidity.
- B. maturity.
- C. default risk.
- D. business risk.

19 Correct answer is **C**

“The Time Value of Money,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 172-174

Study Session 2-5-b

explain an interest rate as the sum of a real risk-free rate, expected inflation, and premiums that compensate investors for distinct types of risk

The difference in yield on otherwise identical U.S Treasury and corporate bonds is attributed to default risk.

20、 Rachel Kelly, age 24, is planning for retirement. Kelly's annual consumption expenditures are currently \$30,000. She assumes her consumption expenditures will increase with the rate of inflation, which she expects to average 3% until she retires at age 68. Given a life expectancy of 83 years and constant expenditures in retirement, the amount Kelly must accumulate by her retirement date, assuming an 8% rate of return on her retirement account, is closest to:

Select exactly 1 answer(s) from the following:

- A. \$320,000.
- B. \$423,000.
- C. \$1,176,000.
- D. \$1,552,000.

20 Correct answer is **C**

“The Time Value of Money,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 190-208

Study Session 2-5-d, e

calculate and interpret the future value (FV) and present value (PV) of a single sum of money, an ordinary annuity, an annuity due, a perpetuity (PV only), and a series of unequal cash flows;

draw a time line, specify a time index, and solve time value of money applications (for example, mortgages and savings for college tuition or retirement)

Kelly expects her consumption spending (currently \$30,000 annually) to increase with the rate of inflation (3%) over the next 44 years until she retires. Her annual consumption spending at the time she retires will be \$110,143.57 (PV = 30,000, %I = 3, N = 44, solve for FV). To support that level of spending for 25 years of retirement, assuming an 8% return on her retirement account, she must accumulate \$1,175,756 by her retirement date (PMT = 110,143.57, N = 25, %I = 8, solve for PV).

21、 An analyst gathered the following information about a capital investment's cash flows:

<u>Time</u>	<u>Cash Flow</u>
0	(\$500,000)
1	\$100,000
2	\$200,000
3	\$100,000
4	\$300,000

If the risk-free interest rate is 6%, expected inflation is 3%, and the opportunity cost of capital is 12%, the investment's net present value (NPV) is *closest* to:

Select exactly 1 answer(s) from the following:

- A. (\$24,537.)
- B. \$10,558.
- C. \$49,825.
- D. \$93,929.

21 Correct answer is **B**

“Discounted Cash Flow Applications,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 214-216

Study Session 2-6-a

calculate and interpret the net present value (NPV) and the internal rate of return (IRR) of an investment, contrast the NPV rule to the IRR rule, and identify problems associated with the IRR rule

The NPV equals the present value (at time = 0) of the future cash flows discounted at the opportunity cost of capital (12%) minus the initial investment, or \$10,558 ($CF_0 = -500,000$, $CF_1 = 100,000$, $CF_2 = 200,000$, $CF_3 = 100,000$, $CF_4 = 300,000$, $I = 12$, solve for $NPV = 10,557.94 \approx 10,558$).

22、An analyst gathered the following information about a common stock investment:

	<u>Date</u>	<u>Amount</u>
Stock purchase	15 January 2007	€48.00
Cash dividend	14 July 2007	€4.00
Stock sale	15 July 2007	€54.00

The holding period return on the common stock investment is *closest* to:

Select exactly 1 answer(s) from the following:

- A. 12.5%.
- B. 20.8%.
- C. 25.0%.
- D. 41.7%.

22 Correct answer is **B**

“Discounted Cash Flow Applications,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 221-222

Study Session 2-6-b

define, calculate, and interpret a holding period return (total return)

The holding period return (HPR) is calculated as follows:

$HPR = (P_1 - P_0 + D_1) / P_0$, where P_0 is the initial investment, P_1 is the price received at the end of the holding period, and D_1 is the cash paid by the investment at the end of the holding period. In this case: $HPR = (54 - 48 + 4) / 48 = 20.8\%$. The HPR is not annualized for holding periods shorter than a year.

23、A 270-day U.S. Treasury bill with a face value of \$100,000 sells for \$96,500 when issued. Assuming an investor holds the bill to maturity, the investor's money market yield and effective annual yield, respectively, are *closest* to:

	<u>Money market yield</u>	<u>Effective annual yield</u>
A.	4.667%	4.903%
B.	4.667%	4.934%
C.	4.836%	4.903%
D.	4.836%	4.934%

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

23 Correct answer is **D**

“Discounted Cash Flow Applications,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 229-233

Study Session 2-6-d

calculate and interpret the bank discount yield, holding period yield, effective annual yield, and money market yield for a U.S. Treasury bill; and convert among holding period yields, money market yields, effective annual yields, and bond equivalent yields

The money market yield is computed by annualizing the holding period yield (HPY) assuming a 360-day year. In this case, the HPY is $(100,000 - 96,500) / 96,500 = 3.627\%$ and the money market yield = $3.627\% \times (360 / 270) = 4.836\%$.

The effective annual yield (EAY) compounds the HYP forward to one year (assuming a 365-day year). In this case, the EAY = $(1 + 0.03627)^{365 / 270} - 1 = 4.934\%$.

24、 An analyst gathered the following information about the price-earnings (P/E) ratios for the common stocks held in a foundation's portfolio:

<u>Interval</u>	<u>P/E range</u>	<u>Frequency</u>
I	8.00 – 16.00	24
II	16.00 – 24.00	48
III	24.00 – 30.00	22
IV	30.00 – 38.00	16

The relative frequency and the cumulative relative frequency, respectively, for Interval III are *closest* to:

	<u>Relative frequency</u>	<u>Cumulative relative frequency</u>
A.	20%	36%
B.	20%	85%
C.	22%	36%
D.	22%	85%

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

24 Correct answer is **B**

“Statistical Concepts and Market Returns,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 243-250

Study Session 2-7-c

calculate and interpret relative frequencies and cumulative relative frequencies, given a frequency distribution, and describe the properties of a dataset presented as a histogram or a frequency polygon

The relative frequency is the number of observations in an interval divided by the total number of observations. For Interval III, relative frequency = $22 / 110 = 20\%$.

The cumulative relative frequency is the sum of the relative frequencies of the relevant class and all the

classes before it. For Interval III, the cumulative relative frequency = $(24 + 48 + 22) / 110 = 85.45\% \approx 85\%$.

25、 An analyst gathered the following annual return information about a portfolio since its inception on 1 January 2003:

<u>Year</u>	<u>Portfolio return</u>
2003	8.6%
2004	11.2%
2005	12.9%
2006	15.1%
2007	-9.4%

The portfolio's mean absolute deviation and variance of annual returns, respectively, for the five-year period are *closest* to:

	<u>Mean absolute deviation</u>	<u>Variance</u>
A.	6.83%	77.5
B.	6.83%	96.8
C.	7.68%	77.5
D.	7.68%	96.8

Select exactly 1 answer(s) from the following:

- A. Answer A.
 - B. Answer B.
 - C. Answer C.
 - D. Answer D.
- 25 Correct answer is A

“Statistical Concepts and Market Returns,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 279-284

Study Session 2-7-f

define, calculate, and interpret 1) a range and a mean absolute deviation, and 2) the variance and standard deviation of a population and of a sample

First, compute the mean portfolio return = $(8.6 + 11.2 + 12.9 + 15.1 - 9.4) / 5 = 7.68\%$

Mean absolute deviation = $(|8.6 - 7.68| + |11.2 - 7.68| + |12.9 - 7.68| + |15.1 - 7.68| + |-9.4 - 7.68|) / 5 = 6.83\%$

Variance = $[(8.6 - 7.68)^2 + (11.2 - 7.68)^2 + (12.9 - 7.68)^2 + (15.1 - 7.68)^2 + (-9.4 - 7.68)^2] / 5 = 77.4536 \approx 77.5$

The population variance calculation is appropriate because the analyst is analyzing all the annual returns on the portfolio since its inception.

26、 An analyst gathered the following information about a common stock portfolio:

Arithmetic mean return	14.3%
Geometric mean return	12.7%
Variance of returns	380
Portfolio beta	1.35

If the risk-free rate of return is 4.25%, then the

coefficient of variation and the Sharpe ratio, respectively, for the portfolio are *closest* to:

	Coefficient of <u>variation</u>	<u>Sharpe ratio</u>
A.	1.36	0.52
B.	1.36	7.44
C.	1.53	0.52
D.	1.53	7.44

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

26 Correct answer is **A**

“Statistical Concepts and Market Returns,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 291-297

Study Session 2-7-h

define, calculate, and interpret the coefficient of variation and the Sharpe ratio

Coefficient of variation	= standard deviation / arithmetic mean return
	= $380^{0.5} / 14.3 = 19.49 / 14.3 = 1.36$
Sharpe ratio	= (mean return - risk free rate) / standard deviation of returns
	= $(14.3 - 4.25) / 19.49 = 0.52$

27、 If an analyst estimates the probability of an event for which there is no historical record, this probability is best described as:

Select exactly 1 answer(s) from the following:

- A. a priori.
- B. objective.
- C. empirical.
- D. subjective.

27 Correct answer is **D**

“Probability Concepts,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 319-320

Study Session 2-8-b

explain the two defining properties of probability, and distinguish among empirical, subjective, and a priori probabilities
An empirical probability cannot be calculated for an event not in the historical record. In this case, the analyst can make a personal assessment of the probability of the event without reference to any particular data. This is a subjective probability.

28、 Which of the following statements regarding correlation and covariance is most likely correct? The correlation between two random variables is their covariance standardized by the:

Select exactly 1 answer(s) from the following:

- A. product of the variables' variances.
- B. variance of the dependent variable.
- C. variance of the independent variable.
- D. product of the variables' standard deviations.

28 Correct answer is **D**

“Probability Concepts,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 342-347

Study Session 2-8-j

calculate and interpret covariance and correlation

The correlation between two random variables is equal to the covariance between the variables divided by the product of the variables' standard deviations.

29、 Which of the following best describes the discrete uniform distribution? The discrete uniform distribution:

Select exactly 1 answer(s) from the following:

- A. has a finite number of specified outcomes.
- B. is based on the Bernoulli random variable.
- C. is approximated by the log-normal distribution.
- D. has an infinite number of unspecified outcomes.

29 Correct answer is **A**

“Common Probability Distributions,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 373-374

Study Session 2-9-d

define a discrete uniform random variable and a binomial random variable, calculate and interpret probabilities given the discrete uniform and the binomial distribution functions, and construct a binomial tree to describe stock price movement
The discrete uniform distribution is known as the simplest of all probability distributions. It is made up of a finite number of specified outcomes and each outcome is equally likely.

30、 An analyst determined that the sample mean and variance for a normal distribution are 42 and 9, respectively. The 99% confidence interval for this random variable is closest to:

Select exactly 1 answer(s) from the following:

- A. 15.0 to 69.0.
- B. 18.8 to 65.2.
- C. 34.3 to 49.7.
- D. 39.0 to 45.0.

30 Correct answer is **C**

“Common Probability Distributions,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

2008 Modular Level I, Vol. 1, pp. 392-393

Study Session 2-9-g

construct and interpret a confidence interval for a normally distributed random variable, and determine the probability that a normally distributed random variable lies inside a given confidence interval

The 99% confidence interval for a normally distributed random variable is equal to the sample mean $\pm 2.58 \times$ sample standard deviation. In this case, the 99% confidence interval $= 42 \pm (2.58 \times 90.5) = 42 \pm (2.58 \times 3) = 42 \pm 7.74 \approx 34.3$ to 49.7.

31、 According to the central limit theorem, a sampling distribution of the sample mean will be approximately normal only if the:

Select exactly 1 answer(s) from the following:

- A. sample size n is large.
- B. underlying distribution is normally distributed.
- C. variance of the underlying distribution is known.
- D. population mean of the underlying distribution is known.

31 Correct answer is **A**

“Sampling and Estimation,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

interpret the central limit theorem and describe its importance

According to the central limit theorem, the sample mean of a population described by *any* probability distribution can be determined if the sample size *n* is sufficiently large, e.g., equal to or greater than 30. This process is used to estimate the population mean and standard deviation, which usually are unknown.

32、 Which of the following is NOT a desirable property of an estimator?

Select exactly 1 answer(s) from the following:

- A. Efficiency.
- B. Reliability.
- C. Consistency.
- D. Unbiasedness.

32 Correct answer is B

“Sampling and Estimation,” Richard A. Defusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkel

identify and describe the desirable properties of an estimator

The three desirable properties of an estimator are unbiasedness, efficiency, and consistency.

33、 The nature of competitive environment to which the game of Prisoners' Dilemma applies and the solution offered by Nash equilibrium, respectively, are:

	<u>Nature of competitive environment</u>	<u>Solution from Nash equilibrium</u>
A.	oligopoly	both prisoners deny
B.	oligopoly	both prisoners confess
C.	monopolistic competition	both prisoners deny
D.	monopolistic competition	both prisoners confess

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

33 Correct answer is B

“Monopolistic Competition and Oligopoly,” Michael Parkin

describe the characteristics of monopolistic competition and oligopoly;

explain the kinked demand curve model and the dominant firm model, and describe oligopoly games including the Prisoners’ Dilemma

The game of Prisoners’ Dilemma applies to oligopoly and the solution from Nash equilibrium is that both prisoners would confess to the crime.

34、 The tax division between buyers and sellers with respect to products with perfectly elastic and perfectly inelastic demand, respectively, are:

	<u>Perfectly elastic demand</u>	<u>Perfectly inelastic demand</u>
--	---------------------------------	-----------------------------------

A.	buyers pay the entire tax.	buyers pay the entire tax.
B.	buyers pay the entire tax.	sellers pay the entire tax.
C.	sellers pay the entire tax.	buyers pay the entire tax.
D.	sellers pay the entire tax.	sellers pay the entire tax.

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

34 Correct answer is **C**

“Markets in Action,” Michael Parkin

2008 Modular Level I, Vol. 2, pp. 74-75

Study Session 4-15-c

explain the impact of taxes on supply, demand, and market equilibrium, and describe tax incidence and its relation to demand and supply elasticity

In the extreme cases of products with perfectly elastic and perfectly inelastic demand, the sellers and buyers, respectively, pay the entire tax.

35 Venkat Reddy is very fond of mango fruits. If mangoes cost 10 rupees each, Reddy spends his budget on fruits that he values more highly than mangoes. However, at 4 rupees each Reddy buys 20 mangoes for devouring over a one-week period. The total consumer surplus in rupees for Venkat would be closest to:

Select exactly 1 answer(s) from the following:

- A. 13.
- B. 26.
- C. 60.
- D. 120.

35 Correct answer is **C**

“Efficiency and Equity,” Michael Parkin

2008 Modular Level I, Vol. 2, pp. 38-41

Study Session 4-14-b

distinguish between the price and the value of a product and explain the demand curve and consumer surplus

The consumer surplus is the value of the good minus the price paid for it $(10-4) = 6$, summed over the quantity bought.

The total consumer surplus is the consumer surplus on each mango that Reddy buys and added together. It is the area of the right triangle = $(\text{base} \times \text{height}) / 2$ as in Figure 3 on p. 40, with base equal to 20 mangoes a week and the height equal to 6, the consumer surplus on each mango. Thus the total consumer surplus = $(20 \times 6) / 2 = \text{Rs.}60$ (see example on p. 41).

36 The Laffer curve depicts a relationship between which of the following sets of two economic variables and its proponents belong to which group of economists?

	<u>Two economic variables</u>	<u>Proponents belong to</u>
A.	Tax rate and tax revenues	Monetarists
B.	Tax rate and tax revenues	Supply-siders
C.	Inflation and unemployment	Monetarists
D.	Inflation and unemployment	Supply-siders

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

36 Correct answer is **B**

“Fiscal Policy,” Michael Parkin

2008 Modular Level I, Vol. 2, pp. 439-440

Study Session 6-27-a

explain supply-side effects on employment, potential GDP, and aggregate supply, including the income tax and taxes on expenditure, and describe the Laffer curve and its relation to supply-side economics

The relationship between the tax rate and the amount of tax revenue collected is called the Laffer curve, named after Arthur B. Laffer, a supply-side economist and a member of President Reagan’s economic policy advisory board. They argued that tax cuts would increase tax revenues and decrease the budget deficit.

37、Choice Malts Breweries has compiled the following information in order to determine its economic profit for the year:

Total revenue	\$300,000
Value of buildings and machinery	
- At the beginning of the year	\$300,000
- At the end of the year	\$280,000
Cost of raw materials	\$100,000
Wages paid during the year	\$ 50,000
Normal profit for the year	\$ 40,000

What is the economic profit of Choice Malts Breweries *closest* to?

Select exactly 1 answer(s) from the following:

- A. \$90,000
- B. \$110,000
- C. \$130,000
- D. \$150,000

37 Correct answer is **A**

“Organizing Production,” Michael Parkin

2008 Modular Level I, Vol. 2, pp. 92-95

Study Session 4-16-a

explain the types of opportunity cost and their relation to economic profit, and calculate economic profit

Opportunity costs	= 100,000 + 50,000 + 40,000 = 190,000
Economic depreciation	= 300,000 – 280,000 = 20,000
Economic profit	= Total revenue – Opportunity costs – Economic depreciation
	300,000 - 190,000 – 20,000 = 90,000

38、 Which of the following provides the *best* description of the effect of subsidies on the prices of goods and the relationship between marginal cost and marginal benefit?

	<u>Effect on prices</u>	<u>Relationship between marginal cost and marginal benefit</u>
A.	Price falls	Marginal benefit exceeds marginal cost
B.	Price falls	Marginal cost exceeds marginal benefit
C.	Price increases	Marginal benefit exceeds marginal cost
D.	Price increases	Marginal cost exceeds marginal benefit

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

38 Correct answer is **B**

“Markets in Action,” Michael Parkin

2008 Modular Level I, Vol. 2, pp. 79-80

Study Session 4-15-d

discuss the impact of subsidies, quotas, and markets for illegal goods on demand, supply, and market equilibrium

Upon introduction of a subsidy, the equilibrium level of supply increases and the price falls. In the new equilibrium, marginal cost (on the supply curve) exceeds marginal benefit (on the demand curve) and a deadweight loss arises due to overproduction (Figure 13 on p. 79).

39、The Okun gap and the inflationary gap, respectively, occur under which of the following economic conditions?

	<u>Okun gap</u>	<u>Inflationary gap</u>
A.	Below full-employment equilibrium	Below full-employment equilibrium
B.	Below full-employment equilibrium	Above full-employment equilibrium
C.	Above full-employment equilibrium	Below full-employment equilibrium
D.	Above full-employment equilibrium	Above full-employment equilibrium

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

39 Correct answer is **B**

“Aggregate Demand and Aggregate Supply,” Michael Parkin

2008 Modular Level I, Vol. 2, pp. 327-328

Study Session 5-23-c

differentiate between short-run and long-run macroeconomic equilibrium, and explain how economic growth, inflation, and changes in aggregate demand and supply influence the macroeconomic equilibrium and the business cycle

A below full-employment equilibrium is a macro-economic equilibrium in which potential GDP exceeds real GDP. The amount by which potential GDP exceeds real GDP is called the Okun gap. An above full-employment equilibrium is a macro-economic equilibrium in which real GDP exceeds potential GDP. The amount by which real GDP exceeds potential GDP is called an inflationary gap.

40、In response to the influx of tourists, the demand for guest rooms in Sun-n-Surf, a resort hotel on a south pacific island, went up from 100 to 150 rooms. As a result, Sun-n-Surf management has decided to increase the tariff from \$150 to \$200 a night per room. The elasticity of supply of rooms in Sun-n-Surf is closest to:

Select exactly 1 answer(s) from the following:

- A. 0.67.
- B. 0.72.
- C. 1.40.
- D. 1.50.

40 Correct answer is **C**

“Elasticity,” Michael Parkin

2008 Modular Level I, Vol. 2, pp. 24-25

Study Session 4-13-a

calculate and interpret the elasticities of demand (price elasticity, cross elasticity, income elasticity) and the elasticity of supply, and discuss the factors that influence each measure

The elasticity of supply equals the percent change in quantity relative to the average quantity divided by the percent change in demand relative to the average demand:

The average quantity = $(100 + 150) / 2 = 125$, the % change in quantity = $50 / 125 = 40$;

The average price = $(150 + 200) / 2 = 175$, the % change in price = $50 / 175 = 28.6$

Elasticity of supply = $40 / 28.6 = 1.40$

41、

	<u>Budget type</u>	Impact on <u>private saving</u>
A.	deficit budget	increase
B.	deficit budget	decrease
C.	surplus budget	increase
D.	surplus budget	decrease

The type of government budget that leads to crowding-out, and its impact on private saving, respectively, are:

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

41 Correct answer is **A**

“Fiscal Policy,” Michael Parkin

2008 Modular Level I, Vol. 2, pp. 444-445

Study Session 6-27-b

discuss the sources of investment finance and the influence of fiscal policy on capital markets, including the crowding-out effect

A deficit budget leads to an increase in interest rates, a decrease in investment, and an increase in private saving.

42、 The type of natural resource market to which the Hotelling principle applies, and the relationship expressed in it, respectively, are:

	Type of natural resource market	<u>Relationship expressed in the Hotelling principle</u>
A.	renewable	the price of the resource rises at a rate equal to the interest rate
B.	renewable	the price of the resource rises at a rate equal to the inflation rate
C.	non-renewable	the price of the resource rises at a rate equal to the interest rate
D.	non-renewable	the price of the resource rises at a rate equal to the inflation rate

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

42 Correct answer is **C**

“Demand and Supply in Factor Markets,” Michael Parkin

2008 Modular Level I, Vol. 2, pp. 271-274

Study Session 5-21-g

differentiate between renewable and non-renewable natural resources and describe the supply curve for each

The Hotelling principle applies to non-renewable natural resources characterized by perfectly elastic flow supply.

According to the Hotelling principle, the price of resource is expected to rise at a rate equal to the interest rate (p. 274).

43. The *most accurate* description of the effect of a price decrease on total revenue for goods that have an elastic and inelastic demand, respectively, are:

	<u>Elastic demand</u>	<u>Inelastic demand</u>
A.	total revenue declines	total revenue declines
B.	total revenue declines	total revenue increases
C.	total revenue increases	total revenue declines
D.	total revenue increases	total revenue increases

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

43 Correct answer is **C**

“Elasticity,” Michael Parkin

2008 Modular Level I, Vol. 2, pp. 15-16

Study Session 4-13-b

calculate elasticities on a straight-line demand curve, differentiate among elastic, inelastic, and unit elastic demand and describe the relation between price elasticity of demand and total revenue

When demand is elastic, a decrease in price by 1% increases the quantity sold by more than 1% and it results in an increase in total revenue. But when demand is inelastic, a decrease in price by 1% increases the quantity sold by less than 1% and it results in a decrease in total revenue.

44、 The three indicators of the state of the labor market that the U.S. Census Bureau calculates include all of the following, except:

Select exactly 1 answer(s) from the following:

- A. the unemployment rate.
- B. the total labor compensation.
- C. the labor force participation rate.
- D. the employment-to-population ratio.

44 Correct answer is **B**

“Monitoring Cycles, Jobs, and the Price Level,” Michael Parkin

2008 Modular Level I, Vol. 2, pp. 288-289

Study Session 5-22-a

describe the phases of the business cycle, define an unemployed person, and interpret the main labor market indicators and their relation to the business cycle

The three indicators of the state of the labor market that the U.S. Census Bureau calculates are:

the unemployment rate, the labor force participation rate, and the employment-to-population ratio.

45、 Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

A company’s cash conversion cycle is most likely to decrease if that company experiences a(n):

Select exactly 1 answer(s) from the following:

- A. increase in the payables turnover ratio.
- B. decrease in the inventory turnover ratio.
- C. increase in the receivables turnover ratio.
- D. decrease in the payables payment period.

45 Correct answer is **C**

“Financial Analysis Techniques,” Thomas R. Robinson, Hennie van Greuning, Elaine Henry, and Michael

A. Broihahn

2008 Modular Level I, Vol. 3, pp. 590-592

“Working Capital Management,” Edgar A. Norton, Jr., Kenneth L. Parkinson, and Pamela p. Peterson

2008 Modular Level I, Vol. 4, pp. 89-92

Study Session 10-41-d, 11-46-a

calculate and interpret activity, liquidity, solvency, profitability, and valuation ratios;

calculate and interpret liquidity measures using selected financial ratios for a company and compare it with peer companies

An increase in receivables turnover would indicate that receivables were outstanding for a shorter period of time, decreasing the cash conversion cycle.

46、 Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

An analyst prepared common-size balance sheets for two companies operating in the same industry. The analyst

noted that both companies had the same proportion of current liabilities, long-term liabilities, and shareholders' equity, and the following ratios:

	<u>Company 1</u>	<u>Company 2</u>
Current ratio	2.0	2.0
Cash ratio	0.3	0.3
Quick ratio	0.5	0.8

The *most* reasonable conclusion is that, compared with Company 2, Company 1 had a:

Select exactly 1 answer(s) from the following:

- A. higher percentage of assets associated with inventory.
- B. higher percentage of assets associated with accounts receivable.
- C. lower percentage of assets associated with marketable securities.
- D. higher percentage of assets associated with marketable securities.

46 Correct answer is **B**

“Financial Analysis Techniques,” Thomas R. Robinson, Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, pp. 574-575, 590-592

“Working Capital Management,” Edgar A. Norton, Jr., Kenneth L. Parkinson, and Pamela p. Peterson

2008 Modular Level I, Vol. 4, pp. 89-90

Study Session 10-41-a, d, 11-46-a

evaluate and compare companies using ratio analysis, common-size financial statements, and charts in financial analysis;

calculate and interpret activity, liquidity, solvency, profitability, and valuation ratios;

calculate and interpret liquidity measures using selected financial ratios for a company and compare it with peer companies

The current ratio includes inventory but the quick ratio does not. (Current ratio is higher than quick ratio and quick ratio is higher than cash ratio.) The quick ratio includes accounts receivable but the cash ratio does not. The denominator for all three ratios is current liabilities, which are the same proportion for both companies. The difference in ratios is therefore created by inventory and accounts receivable. Company 1 has the higher percentage of inventory because the difference between the current ratio and quick ratio is greater for that company. Company 2 had the higher percentage of accounts receivable because the difference between the quick ratio and the cash ratio is greater for Company 2.

47. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

An analyst gathered the following information for a company:

<i>Ratios</i>	<i>2005</i>	<i>2004</i>	<i>2003</i>
Inventory turnover	5	6	7
Total asset turnover	6	5	3
Accounts payable turnover	9	9	8
Accounts receivable turnover	11	12	15

All other factors being equal, which of the following is the *best* conclusion with respect to the information above? From 2003 to 2005, the company's:

Select exactly 1 answer(s) from the following:

- A. fixed asset turnover increased.
- B. credit policies became more strict.
- C. cash conversion cycle became shorter.
- D. average inventory processing time decreased.

47 Correct answer is **A**

“Financial Analysis Techniques,” Thomas R. Robinson, Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, pp. 583-590

“Working Capital Management,” Edgar A. Norton, Jr., Kenneth L. Parkinson, and Pamela p. Peterson

2008 Modular Level I, Vol. 4, pp. 89-90

Study Sessions 10-41-d, 11-46-a

calculate and interpret activity, liquidity, solvency, profitability, and valuation ratios;

calculate and interpret liquidity measures using selected financial ratios for a company and compare it with peer companies

Total asset turnover increased over the period, but turnovers related to the cash conversion cycle decreased or remained relatively stable. The fixed asset turnover had to have increased to offset the decline in inventory and accounts receivable turnovers.

48. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

If a company has a current ratio of 2.0, that company's repayment of \$150,000 in short-term borrowing obtained from a bank would most likely decrease:

Select exactly 1 answer(s) from the following:

- A. the company's current ratio, but not the company's cash flow from operations.
- B. the company's cash flow from operations, but not the company's current ratio.
- C. both the company's current ratio and the company's cash flow from operations.
- D. neither the company's current ratio nor the company's cash flow from operations.

48 Correct answer is **D**

“Understanding the Cash Flow Statement,” Thomas R. Robinson, Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, pp. 251-252

“Financial Analysis Techniques,” Thomas R. Robinson, Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, p. 591

Study Sessions 8-34-a, 10-41-d

compare and contrast cash flows from operating, investing, and financing activities, and classify cash flow items as relating to one of these three categories, given a description of the items;

calculate and interpret activity, liquidity, solvency, profitability, and valuation ratios

The current ratio is above 1.0, so the payment of short-term borrowing would increase the current ratio; it would reduce both the numerator and denominator by the same amount. The repayment of short-term debt would reduce cash flow from financing, not cash flow from operations.

49. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

At the end of the year, a company sold equipment for \$30,000 cash. The company paid \$110,000 for the equipment several years ago and had accumulated depreciation of \$70,000 for the equipment at the time of sale. All else equal, the equipment sale will result in the company's cash flow from:

Select exactly 1 answer(s) from the following:

- A. investing activities decreasing by \$10,000.
- B. investing activities increasing by \$30,000.
- C. operating activities being \$10,000 less than net income.
- D. operating activities being \$30,000 more than net income.

49 Correct answer is **B**

“Understanding the Cash Flow Statement,” Thomas R. Robinson, Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, pp. 251-252, 271-272, 275-276

Study Session 8-34-a, f

compare and contrast cash flows from operating, investing, and financing activities, and classify cash flow items as relating to one of these three categories, given a description of the items;
demonstrate the steps in the preparation of direct and indirect cash flow statements, including how cash flows can be computed using income statement and balance sheet data
The book value of the equipment would have been $\$110,000 - \$70,000 = \$40,000$ at the time of sale, so a loss of \$10,000 for financial statement purposes would be realized. The net loss would reduce net income and would be adjusted in the statement of cash flows by adding the net loss to net income. The total amount of the proceeds (\$30,000) would be shown as a cash inflow from investing activities.

- 50** Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.
In 2007, a company reported net income of \$130 million and cash flow from operations of \$120 million. All else equal, the most likely explanation for the difference between net income and cash flow from operations in 2007 is that the company:
- Select exactly 1 answer(s) from the following:**
- A. tightened credit policies and increased collection efforts during the year.
 - B. purchased new property, plant, and equipment at the beginning of the year.
 - C. sold a long-term investment for an amount equal to book value at the end of the year.
 - D. increased raw materials inventory in anticipation of increased sales at the end of the year.

50 Correct answer is **D**

“Understanding the Cash Flow Statement,” Thomas R. Robinson, Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, pp. 267-271, 276-277

Study Session 8-34-h

analyze and interpret a cash flow statement using both total currency amounts and common-size cash flow statements
The increase in inventory (working capital investment) would reduce cash flow from operations relative to net income.

- 51** Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.
An analyst gathered the following annual information (\$ millions) about a company that pays no dividends and has no debt:

Net income	45.8
Depreciation	18.2
Loss on sale of equipment	1.6
Decrease in accounts receivable	4.2
Increase in inventories	3.4
Increase in accounts payable	2.5
Capital expenditures	7.3
Proceeds from sale of stock	8.5

The company's annual free cash flow to equity (\$ millions) is *closest* to:

- Select exactly 1 answer(s) from the following:**
- A. 53.1.
 - B. 58.4.
 - C. 61.6.
 - D. 64.0.

51 Correct answer is **C**

“Understanding the Cash Flow Statement,” Thomas R. Robinson, Hennie van Greuning, Elaine Henry, and Michael A.

Broihahn

2008 Modular Level I, Vol. 3, pp. 275-278, 287-288

Study Session 8-34-i

explain and calculate free cash flow to the firm, free cash flow to equity, and other cash flow ratios

Free cash flow to equity in a company without any debt is equal to cash flow from operations (CFO) less capital expenditures. $CFO = \text{net income} + \text{depreciation} + \text{loss on sale of equipment} + \text{decrease in accounts receivable} - \text{increase in inventories} + \text{increase in accounts payable}$. (The loss on sale of equipment is added back when calculating CFO. It would have been deducted in the calculation of net income but the loss is not the cash impact of the transaction (the proceeds received, if any, would be the cash effect) and cash flows related to equipment transactions are investing activities, not operating activities.)

$CFO = 45.8 + 18.2 + 1.6 + 4.2 - 3.4 + 2.5 = \68.9 million

$\$68.9 - \$7.3 = \$61.6$ million free cash flow to equity.

52. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

Which of the following statements best describes the level of accuracy provided by a standard audit report?

Select exactly 1 answer(s) from the following:

- A. There is full assurance that the financial statements are fairly presented.
- B. There is reasonable assurance that the financial statements contain no errors.
- C. There is full assurance that the financial statements are free of material errors.
- D. There is reasonable assurance that the financial statements are fairly presented.

52 Correct answer is **D**

“Financial Statement Analysis: An Introduction,” Thomas R. Robinson, Jan Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, p. 21

Study Session 7-29-d

discuss the objective of audits of financial statements, the types of audit reports, and the importance of effective internal controls

Audits provide reasonable assurance that the financial statements are fairly presented, meaning that there is a high degree of probability that they are free of material error, fraud or illegal acts.

53. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

Making any necessary adjustments to the financial statements to facilitate comparison with respect to accounting choices is done in which step of the financial statement analysis framework?

Select exactly 1 answer(s) from the following:

- A. Collect data
- B. Process data
- C. Analyze/interpret the processed data
- D. Develop and communicate conclusions

53 Correct answer is **B**

“Financial Statement Analysis: An Introduction,” Thomas R. Robinson, Jan Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, pp. 26-30

Study Session 7-29-f

describe the steps in the financial statement analysis framework

Making any adjustments is part of the processing data step. Commonly used data bases (part of the collection phase) do not make adjustments for differences in accounting choices.

54. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

During 2007 Nagano Incorporated, a manufacturing company, reported the following items on their income statement:

Loss on disposal of fixed assets	\$50,000
Interest expense	\$62,500

The correct classification of each of these items on the income statement would be as a(n):

	Loss on disposal of <u>fixed assets</u>	<u>Interest expense</u>
A.	operating item	operating item
B.	operating item	nonoperating item
C.	nonoperating item	operating item
D.	nonoperating item	nonoperating item

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

54 Correct answer is **B**

“Understanding the Income Statement,” Thomas R. Robinson, Jan Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, pp. 169-171

Study Session 8-32-f

distinguish between the operating and nonoperating components of the income statement

The loss on the disposal of fixed assets is an unusual or infrequent item but it is still part of normal operating activities.

The interest expense is the result of financing activities and would be classified as a nonoperating expense by nonfinancial service companies.

55. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

The following information was available from the accounting records of a company as at December 31, 2007:

Accounts payable	\$20,000
Accounts receivable	82,000
Bank loan, due on demand	44,000
Cash	12,500
Income taxes payable	5,000
Inventory	47,400
Investments accounted for by the equity method	112,000
Loan payable, due June 30, 2009	50,000
Deposits from customers for deliveries in 2008	8,000

The working capital for the company is *closest* to:

Select exactly 1 answer(s) from the following:

- A. \$14,900.
- B. \$64,900.
- C. \$72,900.
- D. \$176,900.

55 Correct answer is **B**

“Understanding the Balance Sheet,” Thomas R. Robinson, Jan Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, pp. 201-207

Study Session 8-33-a, d

illustrate and interpret the components of the assets, liabilities, and equity sections of the balance sheet, and discuss the uses of the balance sheet in financial analysis;

compare and contrast current and noncurrent assets and liabilities

Working capital = current assets - current liabilities.

Current Assets		The Investments accounted for by the equity method and the Loan payable due June 2009 are non-current assets and liabilities, respectively.
Cashw	\$12,500	
Accounts receivable	82,000	
Inventory	<u>47,400</u>	
	\$141,900	
Current Liabilities		
Bank loan, due on demand	\$44,000	
Accounts payable	20,000	
Income tax payable	5,000	
Deposits from customers for deliveries in 2008	<u>8,000</u>	
	\$77,000	
Working capital: \$141,900 – 77,000 = \$64,900		

56. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

During late December 2007 Popular Publishing Inc. acquired a small competitor, Max's Magazines. In the evaluation of the acquisition it was determined that the customer lists of Max's Magazines had a fair value of \$50,000. Popular Publishing had spent \$15,000 during the year updating and maintaining its own customer lists. What is the correct amount and asset account that will be recorded by Popular Publishing for the year-ended December 31, 2007, related to customer lists?

Select exactly 1 answer(s) from the following:

- A. \$50,000 identifiable intangible asset
- B. \$65,000 identifiable intangible asset
- C. \$50,000 unidentifiable intangible asset
- D. \$65,000 unidentifiable intangible asset

56 Correct answer is **A**

“Understanding the Balance Sheet,” Thomas R. Robinson, Jan Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, pp. 218-220

“Analysis of Long-Lived Assets: Part I – The Capitalization Decision,” Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried

2008 Modular Level I, Vol. 3, pp. 354-355

Study Sessions 8-33-e, 9-36-b

explain the measurement bases (e.g., historical cost and fair value) of assets and liabilities, including current assets, current liabilities, tangible assets, and intangible assets;

determine which intangible assets, including software development costs and research and development costs, should be capitalized, according to U.S. GAAP and international accounting standards

The purchased customer list is an identifiable intangible because it can be sold separately from the company and it would be recorded at its fair market value, the amount paid for it in the acquisition, \$50,000. The amount spent by Popular on its own lists, \$15,000, would have to be expensed because internally generated intangibles are not capitalized.

57. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

Melbourne Manufacturing has equipment with an original cost of \$850,000, accumulated amortization of \$300,000 and 5 years of estimated remaining useful life. Due to a change in market conditions Melbourne now estimates that the equipment will only generate cash flows of \$80,000 per year over its remaining useful life. The company's incremental borrowing rate is 8%. What is the amount of the impairment loss *closest* to and what would be the effect on the company's return on assets (ROA) in future periods?

	Impairment <u>Loss</u>	Effect on ROA in <u>future periods</u>
A.	\$150,000	Increase
B.	\$150,000	Decrease
C.	\$230,583	Increase
D.	\$230,583	Decrease

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

57 Correct answer is **C**

“Understanding the Income Statement,” Thomas R. Robinson, Jan Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, p. 169

“Analysis of Long-Lived Assets: Part II – Analysis of Depreciation and Impairment,”

Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried

2008 Modular Level I, Vol. 3, pp. 403-404

Study Session 9-37-d

explain and illustrate the use of impairment charges on long-lived assets, and analyze the effects of taking such impairment charges on a company’s financial statements and ratios

The equipment is impaired. NBV = \$550,000, which is greater than the sum of the undiscounted cash flows 5 years x \$80,000 = \$400,000. The amount of the impairment is 550,000 – PV of the cash flows = 550,000 – 319,417 (PMT = 80,000, N = 5, i = 8%) = 230,583. The company’s ROA will increase. There will be lower depreciation charges in the future, which will increase net income, and a lower carrying value of assets, which decreases total assets. Both factors would increase any future ROA.

58. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

Which of the following factors is an analyst least likely to consider when determining if a company's deferred tax liabilities should be treated as a liability or equity?

Select exactly 1 answer(s) from the following:

- A. The growth rate of the firm.
- B. The average discount rate of liabilities.
- C. The expectation that temporary differences will reverse.
- D. The use of accelerated depreciation methods for tax purposes.

58 Correct answer is **B**

“Analysis of Income Taxes,” Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried

2008 Modular Level I, Vol. 3, pp. 439-440

Study Session 9-38-d

explain the factors that determine whether a company’s deferred tax liabilities should be treated as a liability or as equity

for purposes of financial analysis

The classification of deferred taxes as liabilities or equity depends on the likelihood, or expectation, of reversal. For growing firms and those using accelerated methods of depreciation, the temporary differences tend not to reverse. If the analyst determined the deferred tax liabilities were likely to reverse, and hence should be classified as liabilities, then it would be appropriate to discount them at the company's average discount rate. But the discount rate is not a factor in determining if reversal is likely.

59、 Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

On January 1, 2007, Peoria Products Inc. entered into a lease agreement to lease a piece of machinery as the lessor. The annual lease payments are \$50,000, due December 31, the lease term is for 5 years, the machine has an estimated useful life of 6 years, and Peoria currently records the machine on its balance sheet at its cost of \$160,000. The incremental rate of the lease is 8% and they are reasonably assured of the collection of the lease payments. Which of the following best describes the classification and effect of the lease on Peoria's income statement for 2007?

Select exactly 1 answer(s) from the following:

- A. Operating lease. Rental revenue of \$50,000.
- B. Direct financing lease. Interest income of \$15,971.
- C. Sales type lease. Gross profit of \$39,635 plus interest income of \$15,971.
- D. Direct financing lease. Gross profit of \$39,635 plus interest income of \$15,971.

59 Correct answer is **C**

“Leases and Off-Balance-Sheet Debt,” Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried
2008 Modular Level I, Vol. 3, pp. 545-551.

Study Session 9-40-d

distinguish between sales-type leases and direct financing leases and explain the effects of these types of leases on the financial statements of lessors

It is a sales type lease: the lease period covers more than 75% of its useful life (5/6) and the asset is on their books at less than the present value of the lease payments (\$199,635) ($PMT = \$50,000$, $N=5$, $i=8\%$). They must have acquired or manufactured the asset if it is recorded at less than the present value of the lease payments. As a sales type lease they will recognize gross profit for the difference of the present value and the cost ($199,635 - 160,000 = 39,635$) and then interest income on the net investment in the lease ($0.08 \times 199,635 = 15,971$).

60、 Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

Which of the following would be the most useful to an analyst trying to assess the credit worthiness of a company?

Select exactly 1 answer(s) from the following:

- A. Return measures related to net income.
- B. Return measures related to operating cash flow.
- C. Information related to the scale and diversity of a company's operations.
- D. Information related to operational efficiency of the company's operations.

60 Correct answer is **B**

“Financial Statement Analysis: Applications,” Thomas R. Robinson, Jan Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, pp. 649-650

Study Session 10-42-c

describe the role of financial statement analysis in assessing the credit quality of a potential debt investment

Credit analysis is concerned with a company's debt-paying ability. Returns to creditors are normally paid in cash, so the company's ability to generate cash internally is the most important factor in credit analysis.

61、 Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

All else equal, the net profit margin for a company will be highest if, for new depreciable assets, that company uses:

Select exactly 1 answer(s) from the following:

- A. low salvage value estimates and long average lives.

- B. high salvage value estimates and long average lives.
- C. low salvage value estimates and short average lives.
- D. high salvage value estimates and short average lives.

61 Correct answer is **B**

“Analysis of Long-Lived Assets: Part II - Analysis of Depreciation and Impairment,” Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried
2008 Modular Level I, Vol. 3, pp. 394-397
Study Session 9-37-b

demonstrate how modifying the depreciation method, the estimated useful life and/or the salvage value used in accounting for long-lived assets affect financial statements and ratios

A high salvage value estimate reduces the depreciable base and thus depreciation expense; long average lives reduce the annual depreciation expense for any given depreciable base. The combination of the two would result in the lowest depreciation expense, which leads to the highest net income and profit margins.

62. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

An analyst gathered the following information about a company (\$ millions):

	2007	2006
Sales	283.5	234.9
Year-end inventory (LIFO inventory method)	81.4	53.7
LIFO reserve	36.4	21.8
Cost of goods sold (LIFO)	203.9	167.3

If the company used the FIFO inventory method instead of LIFO, the company's 2007 gross profit margin would be *closest to*:

Select exactly 1 answer(s) from the following:

- A. 22.9%.
- B. 28.1%.
- C. 29.8%.
- D. 33.2%.

62 Correct answer is **D**

“Analysis of Inventories,” Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried
2008 Modular Level I, Vol. 3, pp. 312-314
Study Session 9-35-c, d

compare and contrast the effect of the different methods on cost of goods sold and inventory balances, and discuss how a company’s choice of inventory accounting method affects other financial items such as income cash flow, and working capital;

compare and contrast the effects of the choice of inventory method on profitability, liquidity, activity, and solvency ratios
COGS on a FIFO basis will equal COGS LIFO - Change in the LIFO reserve. The change in the LIFO reserve is $36.4 - 21.8 = 14.6$; FIFO COGS will be $203.9 - 14.6 = 189.3$. Gross profit will be $283.5 - 189.3 = 94.2$. The gross margin will be $94.2 / 283.5 = 33.23\%$. (The gross margin for LIFO is 28.1%.)

63. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

An analyst gathered the following information about a company that uses the LIFO method:

LIFO reserve as of 31 December 2006	\$420,000
LIFO reserve as of 31 December 2007	\$450,000
Marginal tax rate	30%

If the company had used the FIFO method instead of LIFO, the company's 2007 net income would *most likely* have been:

Select exactly 1 answer(s) from the following:

- A. \$21,000 lower.
- B. \$9,000 lower.
- C. \$9,000 higher.
- D. \$21,000 higher.

63 Correct answer is **D**

“Analysis of Inventories,” Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried

2008 Modular Level I, Vol. 3, pp. 315-320

Study Session 9-35-c, e

compare and contrast the effect of the different methods on cost of goods sold and inventory balances, and discuss how a company’s choice of inventory accounting method affects other financial items such as income cash flow, and working capital;

indicate the reasons that a LIFO reserve might decline during a given period and evaluate the implications of such a decline for financial analysis

The LIFO reserve increased by \$30,000. If an increase in the LIFO reserve occurs, LIFO cost of goods sold will be higher than FIFO by the amount of the increase and net income would be lower than FIFO by $\$30,000(1 - 0.30) = \$21,000$.

After-tax FIFO net income would be \$21,000 higher.

64. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

Greene Corporation uses the LIFO inventory method, but most of the other companies in Greene's industry use FIFO. Which of the following best describes one of the adjustments that would be made to Greene's financial statements to compare that company with other companies in the industry? To adjust Greene's ending inventory to the FIFO method, the amount reported for Greene's ending inventory should be:

Select exactly 1 answer(s) from the following:

- A. increased by the ending balance in Greene's LIFO reserve.
- B. decreased by the ending balance in Greene's LIFO reserve.
- C. increased by the change in Greene's LIFO reserve for that period.
- D. decreased by the change in Greene's LIFO reserve for that period.

64 Correct answer is **A**

“Analysis of Inventories,” Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried

2008 Modular Level I, Vol. 3, p. 312

Study Session 9-35-c, d

compare and contrast the effect of the different methods on cost of goods sold and inventory balances, and discuss how a company’s choice of inventory accounting method affects other financial items such as income cash flow, and working capital;

compare and contrast the effects of the choice of inventory method on profitability, liquidity, activity, and solvency ratios
Adding the ending balance in the LIFO reserve to the LIFO inventory would equal the ending balance for inventory on a FIFO basis.

65. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

An analyst gathered the following information about a company:

Average market price per share of common stock during the year	\$40
Exercise price per share for options on 50,000 common shares	\$50
Exercise price per share for warrants on 20,000 common shares	\$30

Using the treasury stock method, the number of incremental shares that should be used to compute diluted earnings per share is *closest* to:

Select exactly 1 answer(s) from the following:

- A. 5,000.
- B. 12,500.
- C. 15,000.
- D. 17,500.

65 Correct answer is **A**

“Understanding the Income Statement,” Thomas R. Robinson, Hennie van Greuning, Elaine Henry, and Michael A. Broihahn

2008 Modular Level I, Vol. 3, pp. 177-178

Study Session 8-32-h

describe the components of earnings per share and calculate a company's earnings per share (both basic and diluted earnings per share) for both a simple and complex capital structure

Diluted EPS is calculated using the treasury stock method that considers what would be the effect if the options or warrants had been exercised. Only options or warrants that are in-the-money are included, as out-of-the-money options would not be exercised. Therefore, only the warrants are dilutive; the exercise price is below the average market price of the stock. Using the treasury stock method:

$20,000(\$30) = \$600,000$ in proceeds. $\$600,000 / \$40 = 15,000$ shares treasury stock. Incremental shares using the treasury stock method = $20,000 - 15,000 = 5,000$.

66. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

At the beginning of the year, a lessee company entered into a new capital lease agreement. The lease payments are \$100,000 annually and are due at the end of each year for five years. The appropriate discount rate is 12%. Depreciation is on a straight-line basis with zero salvage value. With respect to the effect of the lease on the company's financial statements in the first year of the lease, which of the following is most accurate? The reduction in the company's:

Select exactly 1 answer(s) from the following:

- A. pretax income is \$72,096.
- B. cash flow from financing is \$56,742.
- C. cash flow from operations is \$72,096.
- D. cash flow from operations is \$115,353.

66 Correct answer is **B**

“Leases and Off-Balance Sheet Debt,” Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried

2008 Modular Level I, Vol. 3, pp. 521-524

Study Session 9-40-b

contrast the effects of capital and operating leases on the financial statements and ratios of the lessees and lessors

The present value of the lease is \$360,477.62.

($n = 5$, $I = 12\%$, $PMT = \$100,000$)

12% of the original PV is \$43,257.31 and represents the interest component of the payment in the first year. The difference between the annual payment and the interest is the amortization of the lease obligation and is included in cash flow from financing. $\$100,000 - 43,257.31 = \$56,742.69$.

Depreciation is $\$360,477.62 / 5$ or \$72,095.52, so the total reduction in pretax income would be interest plus depreciation or \$115,352.83. Cash flow from operations would be reduced by the amount of the interest only because the depreciation would be added back to determine cash flow from operations.

67. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

The following information relates to a profitable company that offered a warranty on a new product introduced in 2007:

Actual expenditures for repairs under the warranty in 2007	\$200,000
Accrued warranty expenses for the warranty in 2007	\$300,000

If the company's tax rate is 35%, which of the following *most* accurately describes the deferred tax that should have been recorded in 2007 with respect to that new product warranty?

Select exactly 1 answer(s) from the following:

- A. Deferred tax asset of \$35,000.
- B. Deferred tax asset of \$65,000.
- C. Deferred tax liability of \$35,000.
- D. Deferred tax liability of \$65,000.

67 Correct answer is **A**

“Analysis of Income Taxes,” Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried

2008 Modular Level I, Vol. 3, pp. 423-424, 427

Study Session 9-38-f

calculate and interpret income tax expense, income taxes payable, deferred tax assets and deferred tax liabilities

For financial statement purposes, the company overestimated the warranty expense that was actually incurred in 2007; income for tax purposes was higher than income for financial statement purposes. Tax expense on the financial statements will be less than taxes payable to the government by \$100,000 $(0.35) = \$35,000$. The \$35,000 represents a deferred tax asset.

68. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.

At the beginning of the year, a company issued a \$1,000 face value bond. Interest on that bond is paid semiannually, the annual coupon rate on the bond is 9%, and the bond matures in ten years. The market rate of interest at the time the bond was issued was 10% on an annual basis. The amount of the initial liability recorded for this bond was *closest* to:

Select exactly 1 answer(s) from the following:

- A. \$938.
- B. \$961.
- C. \$1,000.
- D. \$1,065.

68 Correct answer is **A**

“Analysis of Financing Liabilities,” Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried

2008 Modular Level I, Vol. 3, pp. 466-471

Study Session 9-39-b

determine the effects of debt issuance and amortization of bond discounts and premiums on the financial statements and ratios

The liability and interest expense recorded are both based on market rates of interest when the bond was issued, not the coupon rate on the bond. The market value of the bond at issuance was \$937.68. $(FV=1000, PMT=45, N=20, I/Y=5.0)$.

69. An analyst gathered the following information about the cost and availability of raising new capital for a company:

Amount of new debt	Cost of debt	Amount of new	Cost of
--------------------	--------------	---------------	---------

(in millions)	(after tax)	equity (in millions)	equity
New debt \leq €4.0	4%	New equity \leq €5.0	13%
€4.0 < new debt	5%	€5.0 < new equity	15%

The company's target capital structure is 60% equity and 40% debt. If the company raises €9.5 million in new financing, the marginal cost of capital for the last dollar raised is *closest* to:

Select exactly 1 answer(s) from the following:

- A. 9.4%.
- B. 9.8%.
- C. 10.6%.
- D. 11.0%.

69 Correct answer is **C**

“Cost of Capital,” Yves Courtois, Gene C. Lai, and Pamela p. Peterson

2008 Modular Level I, Vol. 4, pp. 64-67

Study Session 11-45-j

describe the marginal cost of capital schedule, explain why it may be upward-sloping with respect to additional capital, and calculate and interpret its break-points

The breakpoints for debt and equity are €10 million (€4.0 million / 0.40) and €8.33 million (€5.0 million / 0.60), respectively. The cost of debt and equity if the firm raises €9.5 million in new financing will be 4% and 15%, respectively, because €9.5 million is below the debt breakpoint and above the equity breakpoint. The marginal cost of capital = $0.40 \times 4\% + 0.60 \times 15\% = 10.6\%$.

70、 An analyst gathered the following information about a company and the industry:

Liquidity measure	Company	Industry
Quick ratio	0.7	1.3
Current ratio	1.1	1.7
Days sales outstanding	38.5	30.2
Days payables outstanding	28.4	22.0

Based only on the data above, the measure that should *most* concern the analyst regarding the company's working capital management is the:

Select exactly 1 answer(s) from the following:

- A. quick ratio.
- B. current ratio.
- C. days sales outstanding.
- D. days payables outstanding.

70 Correct answer is **C**

“Working Capital Management,” Edgar A. Norton, Jr., Kenneth L. Parkinson, and Pamela p. Peterson

2008 Modular Level I, Vol. 4, pp. 89-95

Study Session 11-46-a

calculate and interpret liquidity measures using selected financial ratios for a company and compare it with peer companies

The company’s days sales outstanding is considerably higher than the industry’s, which means the company is slower in collecting its receivables than the average firm. This is a concern because the longer receivables are outstanding, the

greater the probability they will not be collected and will have to be charged off, thereby adversely affecting earnings.

71、 An analyst gathered the following information for a company:

Liquidity measure	Company
Inventory turnover	20.7
Accounts payable turnover	14.1
Accounts receivable turnover	12.5

Based only on the data above, the company's operating cycle is *closest* to:

Select exactly 1 answer(s) from the following:

- A. 19.1 days.
- B. 20.9 days.
- C. 33.2 days.
- D. 46.8 days.

71 Correct answer is **D**

“Working Capital Management,” Edgar A. Norton, Jr., Kenneth L. Parkinson, and Pamela p. Peterson
2008 Modular Level I, Vol. 4, pp. 89-95

Study Session 11-46-a, b

calculate and interpret liquidity measures using selected financial ratios for a company and compare it with peer companies;

evaluate overall working capital effectiveness of a company, using the operating and cash conversion cycles, and compare its effectiveness with other peer companies

Operating cycle = days inventory outstanding + days receivables outstanding

Days inventory outstanding = $365 / \text{inventory turnover} = 17.63$ days

Days receivables outstanding = $365 / \text{accounts receivable turnover} = 29.2$ days

Operating cycle = 17.63 days + 29.2 days = 46.8 days

72、 Afton Inc. is offered trade credit terms of 2/10, net 45. Afton's implicit cost of failing to take the discount and instead paying the account in 45 days is closest to:

Select exactly 1 answer(s) from the following:

- A. 17.10%.
- B. 21.28%.
- C. 23.10%.
- D. 23.45%.

72 Correct answer is **D**

“Working Capital Management,” Edgar A. Norton, Jr., Kenneth L. Parkinson, and Pamela p. Peterson
2008 Modular Level I, Vol. 4, pp. 120-121

Study Session 11-46-f

evaluate the performance of a company's accounts receivable, inventory management, and accounts payable functions against historical figures and comparable peer company values

The cost of trade credit if paid on day 45 = $(1 + 2 / 98)365/35 - 1 = 23.45\%$.

73、 The cash manager for Thomas Industries plans to issue €2,500,000 (face value) of commercial paper for one month. She is quoted a rate of 5.88% with a dealer's commission of 1/8% and a backup line cost of 25 basis points, both of which will be assessed on the face value. The effective cost of the financing is closest to:

Select exactly 1 answer(s) from the following:

- A. 5.91%.
- B. 6.03%.
- C. 6.16%.
- D. 6.29%.

73 Correct answer is **D**

“Working Capital Management,” Edgar A. Norton, Jr., Kenneth L. Parkinson, and Pamela p. Peterson

2008 Modular Level I, Vol. 4, pp. 126-128

Study Session 11-46-g

evaluate the choices of short-term funding available to a company and recommend a financing method

CP cost = [(interest + dealer's commissions + back-up costs) / net proceeds] x 12

Net proceeds = €2,500,000 - (0.0588 x €2,500,000 x 1/12) = €2,487,750

Interest + dealer's commissions + back-up costs = (0.0588 + 0.00125 + 0.0025) x €2,500,000 x 1/12 = 0.6255 x

€2,500,000 x 1/12 = €13,031

CP cost = (13,031 / 2,487,750) x 12 = 6.29%

74、Regarding corporate governance, which of the following most likely would be a reason for concern when evaluating a board member's qualifications? The board member:

Select exactly 1 answer(s) from the following:

- A. has served on the board for 14 years.
- B. owns 1000 shares of the corporation's equity.
- C. is a college professor and a certified public accountant.
- D. has formerly served on the boards of several successful companies.

74 Correct answer is **A**

“The Corporate Governance of Listed Companies: A Manual for Investors” (CFA Institute, 2005)

2008 Modular Level I, Vol. 4, pp. 166-167

Study Session 11-48-d

identify factors that indicate a board and its members possess the experience required to govern the company for the benefit of its shareowners

Such long-term participation may enhance the individual board member's knowledge of the company, but it also may cause the board member to develop a cooperative relationship with management that could impair his/her willingness to act in the best interests of shareowners.

75、 Which of the following is least likely to concern an investor that is evaluating a corporation's shareowner rights provisions?

Select exactly 1 answer(s) from the following:

- A. Shareowners may nominate board members.
- B. Shareowners must attend the annual meeting to vote their shares.
- C. Shares held by the founding family have supernormal voting rights.
- D. To ensure accuracy, company officials tabulate and verify shareowner voting.

75 Correct answer is **A**

“The Corporate Governance of Listed Companies: A Manual for Investors” (CFA Institute, 2005)

2008 Modular Level I, Vol. 4, pp. 182-187

Study Session 11-48-g

evaluate, from a shareowner's perspective, company policies related to voting rules, shareowner sponsored proposals, common stock classes and takeover defenses

The ability to nominate one or more individuals to the board can prevent erosion of shareowner value. Shareowners may be able to force the board or management to take steps to address shareowner concerns.

76、 Which of the following is least likely classified as an opportunity cost?

Select exactly 1 answer(s) from the following:

- A. The market value of vacant land used for a distribution center.
- B. The cash savings related to adopting a new production process.
- C. The cash flows generated by an old machine that is to be replaced.
- D. The rent that could be received on a building if it were not used for a project.

76 Correct answer is **B**

“Capital Budgeting,” John D. Stowe and Jacques R. Gagné

2008 Modular Level I, Vol. 4, pp. 10-12

Study Session 11-44-b

discuss the basic principles of capital budgeting, including the choice of the proper cash flows and determining the proper discount rate

The cash savings related to adopting a new production process is an incremental cash flow, not an opportunity cost.

77、 An analyst determined the following cash flows for a capital project:

Year	0	1	2	3	4	5
Cash flow (€)	-100	30	40	40	30	20

The required rate of return for the project is 13%. The internal rate of return (IRR) and the discounted payback period for the project, respectively, are *closest* to:

	<u>IRR</u>	Discounted payback <u>period</u>
A.	14.85%	2.75
B.	14.85%	3.78
C.	19.25%	2.75
D.	19.25%	3.78

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

77 Correct answer is **D**

“Capital Budgeting,” John D. Stowe and Jacques R. Gagné

2008 Modular Level I, Vol. 4, pp. 12-19

Study Session 11-44-d

calculate and interpret the results using each of the following methods to evaluate a single capital project: net present value (NPV), internal rate of return (IRR), payback period, discounted payback period, average accounting rate of return (AAR), and profitability index (PI)

Using a calculator, the IRR is 19.25%.

The discounted payback period is the number of years (and fractional part of a year) that it takes to recover the initial investment in terms of discounted future cash flows discounted at the project's required rate of return. The discounted cash flows for the first four years are: €26.55, €31.33, €27.72, and €18.40. The cumulative sum through year three is €85.60. The portion of year four required to recover the initial investment is $\text{€}14.40 / \text{€}18.40 = 0.7828 \approx 0.78$. Therefore,

the discounted payback period is 3.78 years.

78、 Two mutually exclusive projects have conventional cash flows, but one project has a larger NPV while the other project has a higher IRR. Which of the following is least likely responsible for this conflict?

Select exactly 1 answer(s) from the following:

- A. Reinvestment rate assumption.
- B. Timing of the projects' cash flows.
- C. Size of the projects' initial investments.
- D. Risk of the projects as reflected in the required rate of return.

78 Correct answer is **D**

“Capital Budgeting,” John D. Stowe and Jacques R. Gagné

2008 Modular Level I, Vol. 4, pp. 19-25

Study Session 11-44-e

explain the NPV profile, compare and contrast the NPV and IRR methods when evaluating independent and mutually-exclusive projects, and describe the problems that can arise when using an IRR

Conflicting decision rules based on the NPV and IRR methods are related to the reinvestment rate assumption, the timing of the cash flows, or the scale of the projects. Differing required rates of return are not related to conflicting NPV and IRR decisions.

79、 Value Line Index and Nikkei-Dow Jones Average use which of the following methods in the computation of the holding period returns of underlying stocks, respectively?

	<u>Value Line Index</u>	<u>Nikkei-Dow Jones Index</u>
A.	Arithmetic mean	Arithmetic mean
B.	Arithmetic mean	Geometric mean
C.	Geometric mean	Arithmetic mean
D.	Geometric mean	Geometric mean

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

79 Correct answer is **C**

“Security-Market Indexes,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 5, pp. 42-46

Study Session 13-53-a

compare and contrast the characteristics of, and discuss the source and direction of bias exhibited by, each of the three predominant weighting schemes used in constructing stock market indexes, and compute a price-weighted, value-weighted, and un-weighted index series for three stocks;

The Value Line Index, an un-weighted index, uses the geometric mean return approach where as the Nikkei-Dow Jones Average, a price-weighted index, uses the arithmetic mean approach.

80、 The four firms in the Internet search engine industry have the following market shares:

<u>Company</u>	<u>Market Share</u>
Gigloo	50%
Ohooho	25%
MySearch	15%
Foxnet	10%

The Herfindahl Index and the "Equivalent Number" of firms in this industry, respectively, are *closest* to:

	<u>Herfindahl Index</u>	<u>"Equivalent Number"</u> <u>of firms</u>
A.	0.345	4.00
B.	0.345	2.90
C.	0.478	2.09
D.	0.478	4.00

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

80 Correct answer is **B**

“Equity: Concepts and Techniques,” Bruno Solnik and Dennis McLeavey

2008 Modular Level I, Vol. 5, pp. 138-139

Study Session 14-58-d, e

discuss the specific advantages of both the concentration ratio and the Herfindahl index;

discuss, with respect to global industry analysis, the elements related to risk, and describe the basic forces that determine industry competition

Herfindahl Index = $0.52 + 0.252 + 0.152 + 0.12 = 0.25 + 0.0625 + 0.0225 + 0.01 = 0.345$

“Equivalent Number” of firms = $1 / 0.345 = 2.8986 \approx 2.90$

81、Chu Wang, CFA, gathered the following data to estimate the implied growth rate of dividends for Shenghai Toys Co. to use as an input for valuing the company's common stock.

Return on Assets	10%
Profit Margin	5%
Total Assets	CNY 50 million
Debt Ratio	40%
Payout Ratio	25%

Wang's estimate of Shenghai Toys' implied growth rate would be closest to:

Select exactly 1 answer(s) from the following:

- A. 4.17%.
- B. 6.25%.
- C. 12.50%.
- D. 18.75%.

81 Correct answer is **C**

“An Introduction to Security Valuation: Part II,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 5, pp. 196-198

Study Session 14-60-e

estimate the implied dividend growth rate, given the components of the required return on equity and incorporating the earnings retention rate and current stock price

$$g = RR \times ROE$$

$$RR = (1 - \text{Payout Ratio}) = 1 - 0.25 = 0.75$$

$$\text{Financial Leverage} = TA / \text{Equity}$$

$$\text{Debt} = TA \times \text{Debt Ratio} = \text{CNY } 50 \text{ m} \times 0.4 = \text{CNY } 20 \text{ m}$$

$$\text{Equity} = \text{CNY } 50 \text{ m} - \text{CNY } 20 \text{ m} = \text{CNY } 30 \text{ m}$$

$$ROE = ROA \times \text{Financial Leverage}; ROE = 10\% \times (50/30) = 16.67\%$$

$$g = 0.75 \times 16.67 = 12.50\%$$

82、 Which of the following is the least accurate statement about the short sale of stocks?

Select exactly 1 answer(s) from the following:

- A. The short seller must pay any dividends due to the lender of shares.
- B. A stop buy order would enable a short seller to minimize potential losses.
- C. Short sales involve time limits for returning the shares borrowed to the lender.
- D. A short sale can be made only on an uptick or a zero uptick trade if the previous trade was an uptick trade.

82 Correct answer is **C**

“Organization and Functioning of Securities Markets,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 5, pp. 24-26

Study Session 13-52-f

describe the process of selling a stock short and discuss an investor’s likely motivation for selling short

Short sales have no time limits. However, if the lender of shares decides to sell them, the broker must find another investor willing to lend the shares.

83、 The appropriate measures of free cash flow and discount rate to use when estimating the total value of a firm, respectively, are:

	<u>Measure of free cash flow</u>	<u>Discount rate</u>
A.	operating cash flow before interest payments on debt	cost of equity
B.	operating cash flow before interest payments on debt	weighted average cost of capital
C.	operating cash flow before interest payments on debt but after deducting base capital expenditures	cost of equity
D.	operating cash flow before interest payments on debt but after deducting base capital expenditures	weighted average cost of capital

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

83 Correct answer is **D**

“An Introduction to Security Valuation: Part II,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 5, pp. 184-185

Study Session 14-60-f

describe a process for developing estimated inputs to be used in the DDM, including the required rate of return and expected growth rate of dividends

In estimating the value of total firm, the free cash flow available to both stockholders and bondholders should be used.

Therefore, operating cash flow before debt related costs and after subtracting the required capital expenditures is the appropriate measure of free cash flow. As the value of the total firm includes the value of equity and the value of debt, the weighted average cost of capital is the relevant discount rate.

84. On January 1, 2008, Abel Moreno, CFO of Monterrey Mining & Metals (MMM), gathered the following data to determine the attractiveness of the company's common stock:

Dividends per share in 2001	2 pesos
Dividends per share in 2007	3 pesos
Expected return on the market	17%
Expected nominal risk-free return	9%
MMM's beta	1.8
MMM share price, January 1, 2008	19 pesos

Based on the information gathered, MMM stock's intrinsic value and its attractiveness on January 1, 2008, respectively, were:

	Stock's intrinsic value <u>closest to:</u>	<u>Stock's attractiveness</u>
A.	18.29 pesos	Over-valued
B.	18.29 pesos	Under-valued
C.	19.57 pesos	Over-valued
D.	19.57 pesos	Under-valued

Select exactly 1 answer(s) from the following:

A. Answer A.

B. Answer B.

C. Answer C.

D. Answer D.

84 Correct answer is **D**

“The Time Value of Money,” Richard A. DeFusco, Dennis W. McLeavy, Jerald E. Pinto, and David E. Runkle

2008 Modular Level I, Vol. 1, pp. 199-200

“Cost of Capital,” Yves Courtois, Gene C. Lai, and Pamela p. Peterson

2008 Modular Level I, Vol. 4, p. 50

“An Introduction to Security Valuation: Part II,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 5, p. 176-181, 198

Study Sessions 2-5-d; 4-45-h; 14-60-b, e

Calculate and interpret the future value (FV) and present value (PV) of a single sum of money, an ordinary annuity, an annuity due, a perpetuity (PV only) and a series of unequal cash flows;

calculate and interpret the cost of equity capital using the capital asset pricing model approach, the dividend discount

model approach, and the bond-yield-plus risk-premium approach;
 calculate and interpret the value both of a preferred stock and a common stock using the dividend discount model (DDM);
 estimate the implied dividend growth rate, given the components of the required return on equity and incorporating the earnings retention rate and current stock price
 $g = \text{growth rate of dividends} = 7\% [(3 / 2)1 / 6]$; $k = 9 + 1.8 (17 - 9) = 23.4\%$
 $V = 3(1.07) / (0.234 - 0.07) = 19.57 \text{ pesos}$;
 The stock’s intrinsic value > price, so it is undervalued.

85、 Strongsville Fabricators Inc. uses the FIFO method of inventory valuation. Assuming a rising costs environment and other factors held constant, Strongsville's price-to-earnings and price-to-book multiples relative to those for another company that uses the LIFO method of inventory valuation would be:

	Price-to-earnings multiple	Price-to-book multiple
A.	overstated	overstated
B.	overstated	understated
C.	understated	overstated
D.	understated	understated

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

85 Correct answer is **D**

“Introduction to Price Multiples,” John D. Stowe, Thomas R. Robinson, Jerald E. Pinto, and Dennis W. McLeavey
 2008 Modular Level I, Vol. 5, pp. 208-209, 216-217

Study Session 14-61-b

calculate and interpret P/E, P/BV, P/S, and P/CF

In a rising costs environment, FIFO would result in higher earnings, higher ending inventory, as well as higher book value of equity. Thus, both P/E and P/BV tend to be understated relative to a comparable firm that uses LIFO method.

86、 The behavior of investors in which they put more money into a failure that they feel responsible for rather than into a success, is explained by which of the following behavioral biases?

Select exactly 1 answer(s) from the following:

- A. Escalation bias
- B. Confirmation bias
- C. Overconfidence bias
- D. Fusion investing bias

86 Correct answer is **A**

“Efficient Capital Markets,” Frank K. Reilly and Keith C. Brown
 2008 Modular Level I, Vol. 5, pp. 83-84

Study Session 14-54-d

define behavioral finance and describe overconfidence bias, confirmation bias, and escalation bias

Escalation bias refers to the investor behavior of putting more money into a failure that they feel responsible for rather than into a success. This leads to the practice of “averaging down” by viewing the additional purchase as a “bargain” rather than considering the initial purchase as a mistake and selling the stock.

87 Jim Klein, CFA, gathered the following data about India Garments Company in an effort to determine the growth rate of dividends and the payout ratio implied in the company's stock price:

Stock price	\$40
Stock's required return	12%
Consensus estimate of next year's dividend	\$2.00
Company's return on equity	10%

The company's dividend

growth rate according to the Gordon model and the payout ratio, respectively, are *closest* to:

	Dividend growth rate	Payout ratio
A.	5%	50%
B.	5%	58%
C.	7%	30%
D.	7%	42%

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

87 Correct answer is **C**

“Cost of Capital,” Yves Courtois, Gene C. Lai, and Pamela p. Peterson

2008 Modular Level I, Vol. 4, pp. 54-55

“An Introduction to Security Valuation: Part II,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 5, pp. 196-197

Study Sessions 11-45-h, 14-60-e

calculate and interpret the cost of equity capital using the capital asset pricing model approach, the dividend discount model approach, and the bond-yield-plus risk-premium approach;

estimate the implied dividend growth rate, given the components of the required return on equity and incorporating the earnings retention rate and current stock price

$V_0 = D_1 / (k - g)$; $\$40 = \$2 / (0.12 - g)$; $g = 7\%$; $g = \text{ROE} \times \text{RR}$; $\text{RR} = 7 / 10 = 0.70$;

Payout Ratio = $1 - \text{RR} = 1 - 0.70 = 0.30 = 30\%$.

88 Which of the following is the attribute that is most closely associated with the liquidity of a securities market?

Select exactly 1 answer(s) from the following:

- A. Low transaction costs
- B. Timely and accurate information
- C. Price continuity and market depth
- D. Rapid adjustment of prices to new information

88 Correct answer is **C**

“Organization and Functioning of Securities Markets,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 5, pp. 7-8

Study Session 13-52-a

describe the characteristics of a well-functioning securities market

Liquidity refers to the ability to buy or sell an asset quickly and at a known price. Price continuity is a component of liquidity which in turn requires market depth. The distracters in A, B, and D are characteristics of a good market, just as liquidity, but not most closely associated with, or as components of, liquidity.

89、 The *most accurate* characterization of the nature of abnormal returns relating to an anomaly and a source of unreliability of an anomaly, respectively, are:

	<u>Nature of abnormal returns</u>	Source of unreliability of <u>an anomaly</u>
A.	Persistent	Behavioral bias
B.	Persistent	Survivorship bias
C.	Momentary	Behavioral bias
D.	Momentary	Survivorship bias

89 Correct answer is **B**

“Market Efficiency and Anomalies,” Vijay Singal

2008 Modular Level I, Vol. 5, pp. 100-107

Study Session 13-55-d

explain why a mispricing may persist and why valid anomalies may not be profitable

The persistent realization of abnormal returns is referred to as an anomaly and survivorship bias is a source of unreliability of an anomaly.

90、 Robert Wu, CFA, gathered the following data on Westminster Property Developers Inc:

Earnings per share - most recent year	\$2.00
Expected growth rate of dividends	5.10%
Dividend payout ratio	60%
Stock's beta	1.50
Market risk premium	5.60%
Risk-free rate	4.2%
Company's weighted average cost of capital	12%

Wu's best estimate for the company's price per share would be *closest* to:

Select exactly 1 answer(s) from the following:

- A. \$16.00.
- B. \$16.82.
- C. \$17.39.
- D. \$18.28.

90 Correct answer is **B**

“An Introduction to Asset Pricing Models,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 4, pp. 263-265

“An Introduction to Security Valuation: Part II,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 5, pp. 180-181

Study Sessions 12-51-e, 14-60-b

calculate, using the SML, the expected return on a security and evaluate whether the security is overvalued, undervalued, or properly valued;

calculate and interpret the value both of a preferred stock and a common stock using the dividend discount model (DDM)

Most recent dividend = $2.00(0.6) = 1.20$

$k_s = 4.20 + 5.60(1.50) = 12.60\%$;

$V = 1.20(1.051) / (0.126 - 0.051) = \16.82

91、A series of interest rate put options that expire on different dates but have the same exercise rate is best characterized as a(n):

Select exactly 1 answer(s) from the following:

- A. zero-cost collar.
- B. interest rate cap.
- C. interest rate floor.
- D. interest rate collar.

91 Correct answer is **C**

“Option Markets and Contracts”, Don M. Chance

2008 Modular Level I, Vol. 6, pp. 90-93

Study Session 17-73-d

define interest rate caps, and floors, and collars

An interest rate floor is a series of put options on an interest rate, with each option expiring at the date on which the floating loan rate will be reset, and with each option having the same exercise rate.

92、The party making the fixed-rate payment under a swap contract could also have to make the variable payment on that contract if the payments are related to a(n):

Select exactly 1 answer(s) from the following:

- A. equity swap.
- B. currency swap.
- C. interest rate swap.
- D. plain vanilla swap.

92 Correct answer is **A**

“Swap Markets and Contracts,” Don M. Chance

2008 Modular Level I, Vol. 6, pp. 130-141

Study Session 17-74-b

define and give examples of currency swaps, plain vanilla interest rate swaps, and equity swaps and calculate and interpret the payments on each

If the value of the index on which the swap is based declines, the resulting negative return would have to be paid by the party making the fixed-rate payment. This characteristic is one of the distinguishing features of equity swaps.

93、An investor establishes a short position in a futures contract on Day 0 when the price per contract is \$100. The investor deposits \$5 per contract to meet the initial margin requirement. The maintenance margin requirement per contract is \$3. The Day 1 settlement price that would require the investor deposit additional funds on Day 2 equal to \$4 per contract is closest to:

Select exactly 1 answer(s) from the following:

- A. \$96.00.
- B. \$97.00.
- C. \$103.00.
- D. \$104.00.

93 Correct answer is **D**

“Futures Markets and Contracts,” Don M. Chance

2008 Modular Level I, Vol. 6, pp. 55-60

Study Session 17-72-c

describe price limits and the process of marking to market, and compute and interpret the margin balance, given the previous day's balance and the change in the futures price

The investor has a short position and will experience a margin call only if the price increases. Additional margin must be deposited to bring the ending balance up to the initial margin requirement. The investor must deposit \$4; therefore, the margin balance on Day 1 is -\$4, which would result if the price of the contract was \$104.

94 Two parties agree to a forward contract to deliver the S&P 500 Index at a price of \$375,000 in 2 months time. When the forward contract expires, the price of the S&P 500 Index is \$350,000 but the long party is unable to pay the cash settlement. The short party is most likely obligated to:

Select exactly 1 answer(s) from the following:

- A. default on the forward contract.
- B. do nothing until the long makes payment.
- C. accept delivery of S&P 500 stocks from the long.
- D. deliver the portfolio of S&P 500 stocks to the long.

94 Correct answer is **B**

“Forward Markets and Contracts,” Don M. Chance

2008 Modular Level I, Vol. 6, pp. 32-33

Study Session 17-71-a

differentiate between the positions held by the long and short parties to a forward contract in terms of delivery/settlement and default risk

Given a forward contract cash settlement, only the net payment is required. The long owes the short \$25,000.

95 If the coupon rate of a bond is higher than its yield to maturity, the price of a bond forward on the coupon date of this coupon-bearing bond will be equal to:

Select exactly 1 answer(s) from the following:

- A. par value.
- B. spot value.
- C. less than par value.
- D. more than par value.

95 Correct answer is **D**

“Forward Markets and Contracts,” Don M. Chance

2008 Modular Level I, Vol. 6, pp. 39-40

Study Session 17-71-d

describe the characteristics of equity forward contracts and forward contracts on zero-coupon and coupon bonds

When the coupon rate of a bond is greater than the yield to maturity, the bond trades at a premium. This is accurate for bond forward contracts.

96 An investor goes long an FRA that expires in 30 days for which the underlying is 90-day LIBOR for a notional of \$10 million. A dealer quotes this instrument at 4.5%. At expiration, 60-day LIBOR is 3.5% and 90-day LIBOR is 4%. The payment made at expiration is closest to:

Select exactly 1 answer(s) from the following:

- A. \$12,376 from the investor to the dealer.
- B. \$12,376 from the dealer to the investor.
- C. \$16,570 from the investor to the dealer.

D. \$16,570 from the dealer to the investor.

96 Correct answer is **A**

“Forward Markets and Contracts,” Don M. Chance

2008 Modular Level I, Vol. 6, pp. 40-43

Study Session 17-71-g

calculate and interpret the payoff of an FRA and explain each of the component terms

The underlying of an FRA is an interest payment. The investor is long the rate and will benefit if rates increase. Since rates decreased, the investor must pay the dealer:

$$\$10,000,000 \left[\frac{(.04 - .045)(90/360)}{1 + .04(90/360)} \right] = \$(-12,376)$$

97、 The spread between the yields on a Ginnie Mae passthrough security and a comparable Treasury security is best explained by:

Select exactly 1 answer(s) from the following:

A. credit risk.

B. the coupon rate.

C. prepayment risk.

D. reinvestment risk.

97 Correct answer is **C**

“Understanding Yield Spreads,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, pp. 357-358

Study Session 15-65-g

identify how embedded options affect yield spreads

Mortgage-backed securities expose an investor to prepayment risk.

98、 According to the Liquidity Preference Theory, is the term structure of interest rates *most likely* related to:

	Expectations about <u>future rates?</u>	<u>Interest rate risk?</u>
A.	No	No
B.	No	Yes
C.	Yes	No
D.	Yes	Yes

Select exactly 1 answer(s) from the following:

A. Answer A.

B. Answer B.

C. Answer C.

D. Answer D.

98 Correct answer is **D**

“Understanding Yield Spreads,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, p. 350

Study Session 15-65-c

explain the basic theories of the term structure of interest rates and describe the implications of each theory for the shape of the yield curve

The Liquidity Preference Theory asserts that market participants want to be compensated for the interest rate risk associated with holding long-term bonds. The longer the maturity, the greater the price volatility when interest rates

change and investors want to be compensated for this risk. According to the Liquidity Preference Theory, the term structure of interest rates is determined by expectations about future rates and a yield premium for interest rate risk. Because interest rate risk increases with maturity, The Liquidity Preference Theory asserts that the yield premium increases with maturity.

99、 An annual-pay bond has a yield to maturity of 5.00%. The bond-equivalent yield of the annual-pay bond is closest to:

Select exactly 1 answer(s) from the following:

- A. 2.50%.
- B. 4.94%.
- C. 5.00%.
- D. 5.06%.

99 Correct answer is **B**

“Yield Measures, Spot Rates, and Forward Rates,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, p. 431

Study Session 16-68-d

compute and interpret the bond equivalent yield of an annual-pay bond and the annual-pay yield of a semiannual-pay bond

The bond-equivalent yield of an annual-pay bond = $2 \times [(1 + \text{yield on annual-pay bond})^{0.5} - 1] = 2 \times [(1 + 0.05)^{0.5} - 1] = 0.0494 = 4.94\%$

100、 An analyst gathered the following information:

Periods	Year	Annual Par Yield to Maturity	Theoretical Spot rate	Six-month Forward Rates
		BEY (%)	BEY (%)	BEY (%)
1	0.5	3.00	3.00	3.00
2	1.0	3.30	3.30	3.61
3	1.5	3.50	3.51	3.91
4	2.0	3.90	3.92	5.15

The value of a single, default-free cash flow of \$50,000 at the end of Period 4 is *closest* to:

Select exactly 1 answer(s) from the following:

- A. \$45,222.
- B. \$46,265.
- C. \$46,299.
- D. \$46,316.

100 Correct answer is **B**

“Yield Measures, Spot Rates, and Forward Rates,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, pp. 440-445, 453-456

Study Session 16-68-e

describe the methodology for computing the theoretical Treasury spot rate curve, and compute the value of a bond using spot rates

The theoretical spot rates for Treasury securities represent the appropriate set of interest rates that should be used to value default-free cash flows. Therefore:

$\$50,000 / (1 + 0.0392/2)^4 = \$46,264.80 \approx \$46,265.$

101、 The zero-volatility spread (Z-spread) is a measure of the spread off:

Select exactly 1 answer(s) from the following:

- A. all points on the spot curve.
- B. one point on the spot curve.
- C. all points on the Treasury yield curve.
- D. one point on the Treasury yield curve.

101 Correct answer is **C**

“Yield Measures, Spot Rates, and Forward Rates,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, pp. 446-449

Study Session 16-68-f

differentiate between the nominal spread, the zero-volatility spread, and the option-adjusted spread

The zero-volatility spread is a measure of the spread that the investor would realize over the entire Treasury spot rate curve if the bond is held to maturity.

102、 The difference between nominal spread and zero-volatility spread will most likely be greater for a:

Select exactly 1 answer(s) from the following:

- A. zero coupon Treasury security.
- B. mortgage-backed security in flat yield curve environment.
- C. U.S. Treasury security with short maturity in a flat yield curve environment.
- D. mortgage-backed security in a steep upward-sloping yield curve environment.

102 Correct answer is **D**

“Yield Measures, Spot Rates, and Forward Rates,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, pp. 449-450

Study Session 16-68-f

differentiate between the nominal spread, the zero-volatility spread, and the option-adjusted spread

The difference between the Z-spread and the nominal spread is greater for issues in which the principal is repaid over time rather than only at maturity. In addition, the difference between the Z-spread and the nominal spread is greater in a steep yield curve environment.

103、 The option adjusted spread (OAS) is best described as the:

Select exactly 1 answer(s) from the following:

- A. Z-spread minus the option cost.
- B. Z-spread plus the cost of the option.
- C. value of the security's embedded option.
- D. effect of changes in interest rates on the value of the security.

103 Correct answer is **A**

“Yield Measures, Spot Rates, and Forward Rates,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, pp. 451-452

Study Session 16-68-g

describe how the option-adjusted spread accounts for the option cost in a bond with an embedded option

The Z-spread is the sum of the OAS and the option cost.

104、 If interest rates are expected to decline, an investor can earn a higher coupon interest rate by purchasing a(n):

Select exactly 1 answer(s) from the following:

- A. callable bond.
- B. inverse floater.
- C. floater with a cap.
- D. mortgage-backed security.

104 Correct answer is **B**

“Features of Debt Securities,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, pp. 242-245

Study Session 15-62-b, e

describe the basic features of a bond, the various coupon rate structures, and the structure of floating-rate securities; identify the common options embedded in a bond issue, explain the importance of embedded options, and state whether such options benefit the issuer or the bondholder

Inverse floaters have a coupon formula such that the coupon rate increases when the reference rate decreases and decreases when reference rate increases. The coupon rate moves in the opposite direction from the change in the reference rate.

105、The duration of a fixed-income portfolio is best interpreted as the:

Select exactly 1 answer(s) from the following:

- A. first derivative of the price function for the bonds in the portfolio.
- B. total number of years to receive the present value of the portfolio's cash flows.
- C. percentage change in the portfolio's value if interest rates change by 100 basis points.
- D. weighted average number of years to receive the present value of the portfolio's cash flows.

105 Correct answer is **C**

“Introduction to the Measurement of the Interest Rate Risk,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, pp. 498-499

Study Session 16-69-e

distinguish among the alternative definitions of duration, and explain why effective duration is the most appropriate measure of interest rate risk for bonds with embedded options;

Users of this interest rate risk measure are interested in what it tells them about the price sensitivity of a bond or a portfolio to change in interest rates.

106、An analyst gathered the following information about the market prices of two option-free bonds, and their expected prices given a 50 basis point increase or decrease in yield.

		Expected Price for	
Bond.	Market Price	50 bp Increase	50 bp decrease
A	102.00	101.04	102.97
B	88.69	83.81	94.07

The effective durations of Bond A and Bond B are *closest* to:

	<u>Bond A</u>	<u>Bond B</u>
A.	0.95	5.78
B.	0.95	11.57
C.	1.89	5.78
D.	1.89	11.57

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

106 Correct answer is **D**

“Introduction to the Measurement of the Interest Rate Risk,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, pp. 488-489

Study Session 16-69-d

compute and interpret the effective duration of a bond, given information about how the bond’s price will increase and decrease for given changes in interest rates, and compute the approximate percentage price change for a bond, given the bond’s effective duration and a specified change in yield

$$\text{Effective duration} = (V_- - V_+) / (2 \times V_0 \times \Delta y)$$

$$\text{Duration for Bond A} = (102.97 - 101.04) / (2 \times 102.00 \times 0.005) = 1.89$$

$$\text{Duration for Bond B} = (94.07 - 83.81) / (2 \times 88.69 \times 0.005) = 11.57$$

107、 A U.S. investor has purchased a tax-exempt 5-year municipal bond at a yield of 3.86%, which is 100 basis points less than the yield on a 5-year option-free U.S. Treasury. If the investor's marginal tax rate is 32%, then the taxable-equivalent yield and the yield ratio are *closest* to:

	Taxable Equivalent Yield	Yield Ratio
A.	2.62	0.79
B.	2.62	1.26
C.	5.68	0.79
D.	5.68	1.26

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

107 Correct answer is **C**

“Understanding Yield Spread,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, pp. 352-355, 359-361

Study Session 16-65-e, i

compute, compare, and contrast the various yield spread measures;
compute the after-tax yield of a taxable security and the tax-equivalent yield of a tax-exempt security

$$\text{Taxable equivalent yield} = (\text{tax-exempt yield}) / (1 - \text{marginal tax rate}) =$$

$$3.86 / (1 - 0.32) = 5.68\%$$

$$\text{Yield ratio} = (\text{yield on tax-exempt bond}) / (\text{yield of US Treasury}) =$$

$$3.86 / (3.86 + 100\text{bp}) = 3.86 / 4.86 = 0.79$$

108、 An analyst gathered the following information about a portfolio comprised of three bonds:

Bond	Price (\$)	Par Amount Owned	Duration
A	102,000	\$7 million	1.89
B	94.356	\$5 million	7.70
C	88.688	\$3 million	11.55

Assuming there is no accrued interest, then the portfolio duration is *closest* to:

Select exactly 1 answer(s) from the following:

A. 5.55 years.

B. 5.76 years.

C. 6.82 years.

D. 7.05 years.

108 Correct answer is **A**

“Introduction to the Measurement of the Interest Rate Risk,” Frank J. Fabozzi

2008 Modular Level I, Vol. 5, pp. 500-501

Study Session 16-69-f

compute the duration of a portfolio, given the duration of the bonds comprising the portfolio, and explain the limitations of portfolio duration

Portfolio value = $(1.02 \times 7 \text{ mil}) + (0.94356 \times 5 \text{ mil}) + (0.88688 \times 3 \text{ mil}) = 14,518,440$

Weight, Bond A = $7,140,000 / 14,518,440 = 0.492$

Weight, Bond B = $4,717,800 / 14,518,440 = 0.325$

Weight, Bond C = $2,660,640 / 14,518,440 = 0.183$

Portfolio duration = $(0.492 \times 1.89) + (0.325 \times 7.70) + (0.183 \times 11.55) = 5.55$

109、 Which of the following statements is least accurate with respect to the advantages of open-end exchange traded funds (ETFs)? Open-end ETFs:

Select exactly 1 answer(s) from the following:

A. tend to trade closer to their net asset values than close-end index funds.

B. provide for more immediate reinvestment of dividends than index mutual funds.

C. provide a more cost-effective way for large institutions to invest in emerging markets.

D. provide lower exposure to capital gains distribution taxes than traditional mutual funds.

109 Correct answer is **C**

“Alternative Investments,” Bruno Solnik and Dennis McLeavey

2008 Modular Level I, Vol. 6, pp. 184-185

Study Session 18-76-c

explain the advantages and risks of ETFs

Some sector and international ETFs have large bid-ask spreads and substantial expense ratios compared to managed portfolios, which may provide a more cost-efficient alternative to ETFs, particularly for large institutional investors.

110、 A real estate investment has the following characteristics:

Annual rental income	\$1,800,000
Annual operating expenses	\$1,200,000
Available mortgage rate	6%
Financing percentage	90%
Required rate of return	15%

Estimated holding period	5 years
Investor's tax rate	25%

Based on the income approach, the value of the investment is *closest* to:

Select exactly 1 answer(s) from the following:

- A. \$4,000,000.
- B. \$5,455,000.
- C. \$6,133,000.
- D. \$8,696,000.

110 Correct answer is **A**

“Alternative Investments,” Bruno Solnik and Dennis McLeavey

2008 Modular Level I, Vol. 6, pp. 193-194

Study Session 18-76-f

calculate the net operating income (NOI) from a real estate investment, the value of a property using the sales comparison and income approaches, and the after-tax cash flows, net present value, and yield of a real estate investment

Using the income approach:

$$(\$1,800,000 - \$1,200,000) / 0.15 = \$4,000,000$$

111、 Which real estate valuation approach is most likely to require specific information about an investor to estimate the value of a property?

Select exactly 1 answer(s) from the following:

- A. Cost approach
- B. Income approach
- C. Sales comparison approach
- D. Discounted after-tax cash flow approach

111 Correct answer is **D**

“Alternative Investments,” Bruno Solnik and Dennis McLeavey

2008 Modular Level I, Vol. 6, pp. 190-198

Study Session 18-76-e

describe the various approaches to the valuation of real estate

The after-tax cash flow approach requires specific information about the investor's marginal tax rate. The value of the property is dependent on the investor's marginal tax rate.

112、 Do hedge funds typically have a(n):

	<u>focus on relative returns?</u>	<u>option-like fee structure?</u>
A.	No	No
B.	No	Yes
C.	Yes	No
D.	Yes	Yes

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

112 Correct answer is **B**

“Alternative Investments,” Bruno Solnik and Dennis McLeavey

2008 Modular Level I, Vol. 6, pp. 209-210

Study Session 18-76-i

discuss the descriptive accuracy of the term “hedge fund,” define hedge fund in terms of objectives, legal structure, and fee structure, and describe the various classifications of hedge funds

Hedge funds focus on absolute returns and place specific bets in the search for positive alphas. Because the fee structure includes a small base fee plus an incentive fee proportional to profits, hedge funds have an option-like fee structure.

113、An analyst compared the performance of a hedge fund index with the performance of a major stock index over the past eight years. She noted that the hedge fund index (created from a database) had a higher average return, higher standard deviation, and higher Sharpe ratio than the stock index. All the successful funds that have been in the hedge fund database continued to accept new money over the eight-year period. Are the average return and the standard deviation, respectively, for the hedge fund index *most likely* overstated or understated?

	Average return for the hedge fund index	Standard deviation for the hedge fund index
A.	Overstated	Overstated
B.	Overstated	Understated
C.	Understated	Overstated
D.	Understated	Understated

Select exactly 1 answer(s) from the following:

- A. Answer A.
- B. Answer B.
- C. Answer C.
- D. Answer D.

113 Correct answer is **B**

“Alternative Investments,” Bruno Solnik and Dennis McLeavey

2008 Modular Level I, Vol. 6, pp. 220-222

Study Session 18-76-l

discuss the performance of hedge funds, the biases present in hedge fund performance measurement, and explain the effect of survivorship bias on the reported return and risk measures for a hedge fund database

Survivorship bias affects both the returns and the risk (standard deviation) reported for the hedge funds. Hedge funds with low or negative returns will be excluded from the index as will funds with high volatility; those funds will not survive for eight years. If only the successful funds remain in the index, the returns are overstated and the risk is understated.

Overstated returns and understated risk will tend to overstate the Sharpe ratio.

114、An analyst estimates that an initial investment of £500,000 in a venture capital project will pay £6 million at the end of five years if the project succeeds and that the probability the project survives to the end of the fifth year is 25%. The required rate of return for the project is 19%. The expected net present value of the venture capital investment is closest to:

Select exactly 1 answer(s) from the following:

- A. £4,000.
- B. £128,000.
- C. £1,125,000.
- D. £2,014,000.

114 Correct answer is **B**

“Alternative Investments,” Bruno Solnik and Dennis McLeavey

2008 Modular Level I, Vol. 6, pp. 205-206

Study Session 18-76-h

calculate the net present value (NPV) of a venture capital project, given the project’s possible payoff and conditional failure probabilities

The probability that the venture will pay £6 million at the end of five years is 25%. The probability of failure is 75%. The expected NPV if the project succeeds is £2,014,296 using $FV = 6,000,000$, $I = 19\%$, $n = 5$ for a present value of $2,514,296 - 500,000 = 2,014,296$

The NPV of the project is $0.25(2,014,296) + 0.75(-500,000) = 128,574$

The investment has a positive NPV and should be accepted.

115 In the context of capital market theory and the capital asset pricing model (CAPM), the average investor is least likely to be compensated for assuming risk that can be:

Select exactly 1 answer(s) from the following:

- A. reduced by diversification.
- B. related to interest rate volatility.
- C. related to changes in macroeconomic variables.
- D. measured by the standard deviation of returns of the market portfolio.

115 Correct answer is **A**

“An Introduction to Asset Pricing Models,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 4, pp. 259-262

Study Session 12-51-c

define systematic and unsystematic risk, and explain why an investor should not expect to receive additional return for assuming unsystematic risk

Unsystematic risk (risk that can be diversified away) is not rewarded. Systematic risk is the risk for which investors are compensated. Systematic risk is that part of total risk that is correlated with the market and related to changes in macroeconomic variables (such as changes in interest rate volatility). Standard deviation of returns of the market portfolio is a measurement of systematic risk.

116 As an investor assumes more risk and moves upward on the efficient frontier, the slope of the efficient frontier curve most likely:

Select exactly 1 answer(s) from the following:

- A. increases and expected return per unit of risk increases.
- B. increases and expected return per unit of risk decreases.
- C. decreases and expected return per unit of risk increases.
- D. decreases and expected return per unit of risk decreases.

116 Correct answer is **D**

“An Introduction to Portfolio Management,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 4, pp. 248-249

Study Session 12-50-f

describe the efficient frontier, and explain the implications for incremental returns as an investor assumes more risk

The efficient frontier is curved. As an investor moves up the curve, risk increases and the slope decreases. The decreasing slope means that adding equal increments of risk provide diminishing increments of expected return.

117、 Which of the following statements about the relation between covariance and correlation is least accurate? If the covariance of returns between two assets is positive, the correlation coefficient for those two assets:

Select exactly 1 answer(s) from the following:

- A. must also be positive.
- B. could be a negative number.
- C. could indicate a strong positive relation if both return series were stable.
- D. could indicate a weak positive relation if both return series were volatile.

117 Correct answer is **B**

“An Introduction to Portfolio Management,” by Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 4, pp. 232-237

Study Session 12-50-d

compute and interpret the covariance of rates of return, and show how it is related to the correlation coefficient

If the covariance of returns between two assets is a positive number, the correlation coefficient for those two assets cannot be negative. The correlation coefficient is equal to the covariance standardized by the product of the individual standard deviations (which are always positive).

118、 The risk-free rate of return is 3%, the market risk premium is 9%, and the market is in equilibrium. If a common stock with a beta of 1.2 is properly valued, then the stock's estimated rate of return is closest to:

Select exactly 1 answer(s) from the following:

- A. 10.2%.
- B. 10.8%.
- C. 13.8%.
- D. 14.4%.

118 Correct answer is **C**

“An Introduction to Asset Pricing Models,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 4, pp. 264-266

Study Session 12-51-e

calculate, using the SML, the expected return on a security, and evaluate whether the security is overvalued, undervalued, or properly valued

In equilibrium the estimated rate of return is equal to the required return. The CAPM required rate of return = $3\% + (1.2 \times 9\%) = 13.8\%$.

119、 Regarding an individual's investment policy statement, which of the following is least appropriate as the investment objective? The portfolio seeks:

Select exactly 1 answer(s) from the following:

- A. current income in the form of dividends and interest.
- B. 12% annual returns with above-average market risk.
- C. to match the performance and risk characteristics of the S&P 500 Index.
- D. long-term capital appreciation with market risk comparable to the MSCI EAFE Index.

119 Correct answer is **A**

“The Asset Allocation Decision,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 4, pp. 202-210

Study Session 12-49-a, b, c

describe the steps in the portfolio management process, and explain the reasons for a policy statement;

explain why investment objectives should be expressed in terms of risk and return, and list the factors that may affect an investor's risk tolerance;

describe the return objectives of capital preservation, capital appreciation, current income, and total return

The investment objective must be expressed in terms of both risk and return and current income from dividends and interest represents only the investor's return objective. It does not include any reference to risk tolerance or risk limits as provided in the other alternatives.

120、 An analyst gathered the following information about a common stock:

Probability	Possible Rate of Return
0.35	8%
0.30	10%
0.25	15%
0.10	20%

The expected return and expected standard deviation of returns, respectively, for the common stock are *closest* to:

Select exactly 1 answer(s) from the following:

- A. 12% and 3.9%.
- B. 12% and 15.3%.
- C. 14% and 3.9%.
- D. 14% and 15.3%.

120 Correct answer is **A**

“An Introduction to Portfolio Management,” Frank K. Reilly and Keith C. Brown

2008 Modular Level I, Vol. 4, pp. 230-232

Study Session 12-50-c

compute and interpret the expected return, variance, and standard deviation for an individual investment and the expected return and standard deviation for a portfolio

The expected return of an asset is the weighted average of the possible returns = $(0.35 \times 8) + (0.30 \times 10) + (0.25 \times 16) + (0.10 \times 20) = 11.8\%$.

The expected standard deviation is calculated as follows:

$$\sigma^2 = 0.35 \times (8 - 11.8)^2 + 0.30 \times (10 - 11.8)^2 + 0.25 \times (15 - 11.8)^2 + 0.10 \times (20 - 11.8)^2$$
$$= 15.31$$

$$s = (15.31)^{0.5} = 3.91\%$$