FinQuiz.com

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FinQuiz.com – 1st Mock Exam 2019 (AM Session)

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Questions 1 through 18 relate to Ethical and Professional Standards

1. An analyst's investment recommendation and opinions with regard to selling, purchasing and holding securities, disseminated to customers through oral communication is:

   A. not allowed according to CFA Institute *Standards of Practice Handbook.*
   B. only allowed if the information has already been disseminated through other communication channels as well.
   C. is allowed according to CFA Institute *Standards of Practice Handbook* if the firm has such a dissemination policy for its customers.

   Correct Answer: C

   Reference:
   CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-b.

   An analyst's investment recommendation and opinions with regard to selling, purchasing and holding securities may be disseminated to clients through oral communication. Member or candidate is obligated to ensure that information is disseminated in such a manner that all clients have fair opportunity to act on every recommendation.

2. Which of the following is *least likely* required by the CFA Institute Code of Ethics? Members and candidates must:

   A. strive to maintain and improve the competence of their clients.
   B. practice and encourage others to practice in a professional and ethical manner.
   C. place the integrity of investment profession and interests of clients above their own personal interests.

   Correct Answer: A

   Reference:
   CFA Level I, Volume 1, Study Session 1, Reading 2, LOS-b.

Options B and C are correct.

The members and candidates must:

- strive to maintain and improve the competence of **other investment professionals.**
- practice and encourage others to practice in a professional and ethical manner.
- place the integrity of investment profession and interests of clients above their own personal interests.

3. Marc Bowen, executive vice president at Ramon Brokerage, a large broker/dealer firm, is responsible for directing and leading 50 associates, to manage the compliance of regulatory requirements and to mitigate financial risks. Bowen delegated his responsibilities among his associates and instructed them about methods to prevent and detect violations of laws and regulations clearly. Due to his preoccupation with other projects Bowen never had sufficient time to review their work. According to the Code and standards, will Bowen be held responsible if an associate fails to fulfill regulatory requirements?

   A. No, because he clearly instructed the methods to prevent and detect violations.
   B. Yes, because he should decline in writing to delegate the responsibilities to his associates.
   C. Yes, because he fails to make reasonable efforts to ensure that the procedures are monitored and enforced.

Correct Answer: C

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-b.

Bowen will also be held responsible for the failure of an associate to fulfill regulatory requirements because he has not made reasonable efforts to ensure that the procedures are monitored and enforced. He may delegate responsibilities among his associates, but such delegations do not relieve him of his supervisory responsibilities.

4. Which of the following statements is *most likely* correct regarding GIPS standards?

   A. Compliance with the GIPS standards is typically required by legal and regulatory authorities.
   B. Plan sponsors and consultants can make a claim of compliance if they are actually managing assets.
   C. An investment management firm complying with a majority of the requirements of GIPS can make reference to the GIPS standards.

Correct Answer: B

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 4, LOS-a.

- Compliance with the GIPS standards is **not** typically required by legal and regulatory authorities.
- Plan sponsors and consultants can make a claim of compliance if they are actually managing assets.
- An investment management firm not complying with all the requirements of the GIPS standards few **cannot** make **any** reference to the standards.

5. Amanda, CFA is an equity analyst with Dennis Securities and is analyzing the stocks of Pearl Inn Corp. In her research, Amanda observed that:

- Pearl Inn is a company with bright future prospects.
- Pearl Inn's current stock price is fully valued.
- Compensation of Pearl Inn's managers is dependent on stock performance therefore any negative report can further affect managers' performances and can hurt the company's future growth.

Keeping in view all these facts she concluded that a buy recommendation for Pearl Inn Corp.'s stock is appropriate. Amanda

A. violated the standard relating to the responsibilities as a CFA Institute member.
B. is in full compliance with the standards due to her foresight and long term vision for Pearl Inn.
C. violated the standards because she lacks reasonable and adequate basis for her recommendation.

Correct Answer: C

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-b.

Amanda's analysis must be objective and based solely on company's fundamentals. Recommending a stock when it is fully valued is not favorable for investors, as a company with 'bright future prospects' may not necessarily translate into strong stock performance. Amanda's judgment is influenced by the compensation she will receive in case of a negative report, which further impairs her independence and objectivity.

6. According to CFA Institute *Standards of Practice Handbook,* recommended procedures for block trade and new issues *least likely* include:

A. processing and executing bundling orders on FIFO basis for efficiency purposes.
B. giving same execution price and charging same commission for all clients participating in block trade.
C. prohibiting partial fills when trades are grouped and requiring cancellation of orders to be documented and time stamped.

Correct Answer: C

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-c.

Options A and B are recommended procedures for block trades and new issues. Although cancellation of orders needs to be documented and time stamped, there is no prohibition of partial fills in grouped trades. Firms should develop policies to address issues such as calculating execution prices and partial fills when trades are grouped or in blocks.

7. Common situational influences in the investment industry that can shape thinking and behavior *least likely* include:

   A. fear.
   B. money.
   C. loyalty.

Correct Answer: A

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 1, LOS-c.

Money and prestige are common situational influences in the investment industry that can shape thinking and behavior. Another powerful situational influence is loyalty. Loyalty to supervisors, organizations, fellow employees or colleagues can also tempt individuals to narrowly focus on short-term factors.

8. Jason Lee is a junior equity analyst at TR-Securities. For the last two weeks during his lunchtime he has been consulting an attorney for bankruptcy filing as a result of his failure to pay debts. He has not discussed his financial situation with any of his colleagues or his employer. Is Lee in violation of any CFA Institute Standards of Professional Conduct?

   A. No, he has not violated any standard.
   B. Yes, he has violated standard I-D 'Misconduct'.
   C. Yes, he has violated standard IV-'Duties to Employer'.

Correct Answer: A

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-b.

Lee has not violated any standard by failing to disclose his personal bankruptcy with his colleagues or his employer. His personal bankruptcy does not reflect poorly on professional integrity or reputation unless it involves fraudulent or deceitful business conduct.

9. The key features of GIPS standards *most likely* include:

   A. addressing every aspect of performance measurement and covering unique characteristics of each asset class.
   B. requiring firms to include all actual, discretionary or non-discretionary, fee paying portfolios in at least one composite defined by investment mandate, objective or strategy.
   C. complying with all requirements of GIPS standards including any updates, guidance statements, interpretations, questions and answers (Q&A) which are available on the GIPS website as well as in the *GIPS Handbook*.

Correct Answer: C

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 5, LOS-a.

Option C correctly represents a key feature of the GIPS standards.

Option A is incorrect. GIPS standards do not address every aspect of performance measurement or cover unique characteristics of each asset class.

Option B is incorrect. Non-discretionary portfolios must not be included in a firm's composites.

10. Sandra Hall, CFA is an analyst with Indus Securities and covers the oil and gas industry. In a meeting with the CEO of B2S Corp., a firm covered by her, she found that the firm's major clients are residents of the country Cote D'lovire. Hallis expects the CFA franc (currency of Cote D'lovire) to depreciate by 15%. Based on this information and her analysis, Hall believes that B2S Corp.'s next quarter's earnings will drop substantially and therefore issues a sell recommendation. Hall:

    A. is in full compliance with the standards.
    B. violated the standard by acting on material nonpublic information.
    C. has failed to satisfy the requirement of Standard V-A, 'Diligence and reasonable basis'.

    Correct Answer: A

    Reference:
    CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-b.

    Hall has not violated any standard as she has arrived at her conclusion using the 'Mosaic theory'. A financial analyst gathers large quantity of information from many sources. Accurate, timely and intelligible communication is needed to make informed decisions about where to invest capital.

11. Sidney Garza is hired by CRT Securities and is responsible for managing several portfolios with net worth greater than $25 million. While inspecting the clients' previous financial records, Garza found several suspicious transactions and some questionable practices involving Alan Hart, CFA, CRT's former manager. The applicable laws are strict and require maintaining confidentiality. Under such circumstances Garza should:

    A. reveal confidential information about clients and should inform the CFA Institute professional conduct program (PCP) about Hart's questionable activities.
    B. not reveal confidential information about clients but should inform the CFA Institute professional conduct program (PCP) about Hart's questionable activities.
    C. not reveal confidential information about clients and should not inform the CFA Institute professional conduct program (PCP) about Hart's questionable activities.

    Correct Answer: C

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-b.

As applicable laws require members and candidates to maintain confidentiality Garza should not reveal confidential information about clients and should not inform the CFA Institute professional conduct program (PCP) about Hart's questionable activities.

12. Jacquelyn Kramer is a portfolio manager at a local advisory firm. One of her friends, Wallace Bob, is an independent research analyst and manages his own blog. From time to time Bob refers his subscribers, who need investment advice and want to build portfolios, to Kramer and in return Kramer pays Bob some nominal fees and research reports prepared by her firm. Kramer has never disclosed this arrangement to anyone in her firm. Kramer *most likely* is in violation by failing to disclose the arrangement:

    A. to her employer and the clients.
    B. to her employer only as clients are not required to pay any additional fess to Bob or Kramer.
    C. to her clients and not obtaining written consent from her employer prior to making such arrangement.

Correct Answer: A

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-b.

According to Standard VI-C 'Referral Fees' members and candidates must disclose to their employer, clients and prospective clients any compensation, consideration or benefits received from or paid to others for recommendations of products and services.

13. If a firm opts for verification of its claim of compliance with the GIPS standards , the firm:

    A. must hire investment management firm only.
    B. is required to use an independent third party only.
    C. can either use an independent third party or can voluntarily perform its own verification.

    Correct Answer: B

    Reference:
    CFA Level I, Volume 1, Study Session 1, Reading 4, LOS-c.

    If a firm opts for verification of its claim of compliance with the GIPS standards, the firm must use an independent third party.

14. If members and candidates have custody of client's assets they must manage them in accordance with:

    A. some benchmark indices.
    B. terms of governing documents.
    C. each asset's risks and return characteristics.

    Correct Answer: B

    Reference:
    CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-b.

    If members and candidates (M&A) have custody or effective control of clients' assets then they have direct or indirect access to client funds. M&A must manage such assets in accordance with the terms of governing documents (such as trust documents and investment management funds) which are the primary determinant of manager's powers and duties.

15. In preparing an investment policy statement and suitability analysis, if a client refuses to provide complete information regarding his financial position, the *most suitable* action for a member or candidate is to:

    A. consult the legal and compliance advisors for guidance.
    B. disclose in writing the impact of withholding information and obtain client approval.
    C. develop an investment policy statement on the basis of information provided.

Correct Answer: C

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-c.

If client withhold information about his financial position the suitability analysis conducted by member or candidate cannot be expected to be complete and it must be based on information provided.

16. Kristin Harper, CFA manages individual client portfolios at Lucas Trust Advisory. One of her clients, Nicholas Hanson, is owner of five hotel brands with approximately 800 hotels in Europe. For her vacations, Hanson offered Harper a 25% discount and free meals if she stayed in his hotels. Harper informed her employer about the discount offered by her client over the phone. According to CFA Institute *Standards of Practice Handbook,* if Harper gets that deal she will:

    A. be in compliance with CFA Institute codes and standards.
    B. violate 'Additional Compensation Arrangements' by failing to disclose free meals and not inform her employer in writing.
    C. violate 'Independence and Objectivity' as accepting a substantial gift can reasonably be expected to compromise her performance for other clients.

Correct Answer: B

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-b.

Standard IV-B 'Additional Compensation Arrangements' requires members and candidates to obtain written consent from employer before accepting any benefits from clients. The employer is entitled to have full knowledge of complete compensation arrangements so as to be able to assess the true cost of the services that members and candidates are providing.

17. Rick Mueller is a junior analyst at Morris & Clifton Advisors (M&CA), a large brokerage and advisory firm with more than 500 analysts. Majority of the analysts at M&CA are either CFA charterholders or are enrolled in different levels of CFA exam program. When the firm asked Mueller, why he wants to become a charterholder, he wrote the following lines "I have passed Level 2 of the CFA exam. In the field of investment management the CFA designation is globally recognized, it is a rigorous and comprehensive study program, and CFA charterholders achieve better performance results."

Mueller is *most likely* in violation of the Standards of Professional Conduct with reference to the statement:

A. "I have passed Level 2 of the CFA exam."
B. "It is a rigorous and comprehensive study program."
C. "CFA charterholders achieve better performance results."

Correct Answer: C

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 3, LOS-b.

Options A and B do not represent violations while option C does. Standard VII-B prohibits members or candidates from exaggerating the meaning or implications of membership in the CFA Institute, holding the CFA designation or candidacy in the CFA program.

18. In complying with the GIPS standards, if existing laws and regulations already impose requirements related to the calculation and presentation of investment performance:

    A. firms are required to comply with laws and regulations and disclose the fact in its compliant presentation.
    B. firms' compliance with applicable laws and regulations leads to compliance with the GIPS standards.
    C. firms are strongly encouraged to comply with GIPS standards in addition to applicable regulatory requirements.

Correct Answer: C

Reference:
CFA Level I, Volume 1, Study Session 1, Reading 5, LOS-c.

Option C is correct. In case existing laws and regulations already impose requirements related to the calculation and presentation of investment performance firms are strongly encouraged to comply with GIPS standards in addition to applicable regulatory requirements.

Option B is incorrect. Compliance with the laws and regulations **does not** necessarily lead to compliant with the GIPS standards.

Option A is incorrect. In case existing laws and regulations **conflict** with the GIPS standards, firms are required to comply with laws and regulations and make full disclosure of the conflict in the compliant presentation.

Questions 19 through 32 relate to Quantitative Methods

19. A pharmaceutical firm has submitted a new drug application (NDA) to FDA. An analyst estimates that the odds for the successful approval of the drug are 1 to 4 and the firm's estimated EPS for the FY2014 is $15 if FDA accepts NDA and $7 if FDA rejects NDA.

    Firm's expected EPS for FY2014 is *closest* to:

    A. $8.6.
    B. $9.0.
    C. $11.2.

    Correct Answer: A

    Reference:
    CFA Level I, Volume 1, Study Session 2, Reading 9, LOS-c.

    Firm's expected EPS
    = (Prob. of NDA acceptance) x EPS + (Prob. of NDA rejection) x EPS
    = $1/5 \times 15 + 4/5 \times 7$
    = $8.6.

20. A U.S. firm will receive four annual payments of £60,000 from its subsidiary in U.K. and the firm will invest these payments at the 12% annual interest offered by a U.K. bank. If the first payment will be received three years from now, how much will the payments be worth in ten years?

    A. £451,222.
    B. £530,563.
    C. £605,341.

    Correct Answer: A

    Reference:
    CFA Level I, Volume 1, Study Session 2, Reading 6, LOS-e.

Option A is correct.

i. First calculate equal lump sum of four £60,000 annual payments three years from today.

Pmt. = 60,000	N = 4	Int. = 12%	PV = 0

Calculate FV = 286,760.

ii. Now by using future value of lump sum, bring the single lump sum of £286,760 to an equivalent lump sum of £451,222 six years from now.

Pmt. = 0	N = 4	Int. = 12%	PV = 286,760

Calculate FV = 451,222.

21. When a person wants to assign every member of a group of size *n* to one of *n* slots, he will *most likely* use:

A. *n* factorial.
B. multinomial formula.
C. combination formula.

Correct Answer: A

Reference: CFA Level I, Volume 1, Study Session 2, Reading 9, LOS-o.

When a person wants to assign every member of a group of size *n* to one of *n* slots, he will use *n* factorial.

22. What is the probability that a portfolio's return will exceed 35%, if its mean return is 25% and the standard deviation of return is 37%, assuming normal distribution?

Table 5	$P(Z \le x) = N(x)$ for $x \ge 0$ or $P(Z \le z) = N(z)$ for $z \ge 0$									
x or z	**0**	**0.01**	**0.02**	**0.03**	**0.04**	**0.05**	**0.06**	**0.07**	**0.08**	**0.09**
0.00	0.5000	0.5040	0.5080	0.5120	0.5160	0.5199	0.5239	0.5279	0.5319	0.5359
0.10	0.5398	0.5438	0.5478	0.5517	0.5557	0.5596	0.5636	0.5675	0.5714	0.5753
0.20	0.5793	0.5832	0.5871	0.5910	0.5948	0.5987	0.6026	0.6064	0.6103	0.6141
0.30	0.6179	0.6217	0.6255	0.6293	0.6331	0.6368	0.6406	0.6443	0.6480	0.6517
0.40	0.6554	0.6591	0.6628	0.6664	0.6700	0.6736	0.6772	0.6808	0.6844	0.6879
0.50	0.6915	0.6950	0.6985	0.7019	0.7054	0.7088	0.7123	0.7157	0.7190	0.7224

A. 27.03%
B. 39.36%
C. 60.64%

Correct Answer: B

Reference:
CFA Level I, Volume 1, Study Session 3, Reading 10, LOS-l.

$Z = \frac{(X-\bar{X})}{s} = \frac{(35\%-25\%)}{37\%} = 0.2703$
According to the table $N(x) = 0.6064$

For probability to the right of x, $P(Z \geq x) = 1 - N(x)$ therefore
1- 0.6064 = 0.3936 = 39.36%

23. An investment with a face value of $100,000 and 145 days until maturity is selling for $96,700. The money market yield of the investment is *closest* to:

A. 8.19%.
B. 8.47%.
C. 8.52%.

Correct Answer: B

Reference:
CFA Level I, Volume 1, Study Session 2, Reading 7, LOS-e.

Money market yield = $Holding\ Period\ Yield\ \times \frac{360}{t}$ = 0.0341 x 360/145 = 8.47%

Holding Period Yield = $\frac{P_1 - P_0 + D_1}{P_0} = \frac{100{,}000 - 96{,}700}{96{,}700}$ = 0.0341.

24. Which of the following *best* describes the advantages of Monte Carlo simulation? Monte Carlo simulation:

    A. is grounded in actual data like historical simulation.
    B. can be used to perform "what if" analysis unlike historical simulation.
    C. provides better insight into cause-and-effect relationships compared to analytical methods.

Correct Answer: B

Reference:
CFA Level I, Volume 1, Study Session 3, Reading 10, LOS-r.

Historical simulation unlike Monte Carlo simulation is grounded in past records.

Compared with Monte Carlo simulation historical simulation does not lend itself to "what if" analysis.

Analytical methods provide more insight to cause-and-effect relationships compared to Monte Carlo simulations.

25. How would a technician seek to generate profit in a reverse head and shoulder pattern if the price at the bottom of the head was $156 and neckline price was roughly $187?

    A. By taking a long position in the stock and by setting the price target at $218.
    B. By taking a short position in the stock and by setting the price target at $125.
    C. By short selling the stock and anticipating a profit of $31 excluding transaction cost.

Correct Answer: A

Reference:
CFA Level I, Volume 1, Study Session 3, Reading 13, LOS-e.

Under a reverse head and shoulder pattern, technicians seek to generate profit by taking a long position in the security under analysis.

The price target can be set as follows:

Price target = Neckline price + (Neckline price – Head price)
= 187 + (187 - 156)
= $218.

26. Technical analysis is *least likely* based on the factor that:

A. future price movements are predictable.
B. prices are determined by economic factors.
C. changes in supply and demand cause changes in prices.

Correct Answer: B
Reference:
CFA Level I, Volume 1, Study Session 3, Reading 13, LOS-a.

Technical analysis is based on three simple principles.

i. Supply and demand determines prices.
ii. Changes in supply and demand cause changes in prices.
iii. Charts and other technical tools can be used to determine future prices.

27. Table below gives statistics relating to three portfolios for the year 2013.

Portfolio	Mean Annual Return (%)	Standard Deviation of Return (%)	Skewness	Excess Kurtosis
A	14.31	23.67	+0.02	+0.01
B	12.65	14.52	-0.01	-0.03
C	10.06	9.66	-0.02	+0.02

*Risk-free rate for 2013 = 6%

Based on the information provided above, the portfolio with superior risk-adjusted performance is:

A. Portfolio A.
B. Portfolio B.
C. Portfolio C.

Correct Answer: B

Reference:
CFA Level I, Volume 1, Study Session 2, Reading 8, LOS-i.

Portfolio B has superior risk-adjusted performance because it has the highest Sharpe ratio.

Sharpe ratio of Portfolio A= 0.3511 = $(\frac{14.31\%-6\%}{23.67\%})$
Sharpe ratio of portfolio B = 0.4580 = $(\frac{12.65\%-6\%}{14.52\%})$
Sharpe ratio of Portfolio C = 0.4203 $(\frac{10.06\%-6\%}{9.66\%})$.

Skewness and kurtosis of all three portfolios are close to zero and their annual returns appear to have been approximately normally distributed during the year 2013.

28. Harmonic mean is a special type of weighted mean in which each observation's weight is inversely proportional to:

    A. its magnitude.
    B. a fixed amount.
    C. n (total observations).

Correct Answer: A

Reference:
CFA Level I, Volume 1, Study Session 2, Reading 8, LOS-e.

Harmonic mean is a special type of weighted mean in which each observation's weight is inversely proportional to its magnitude.

29. An analyst is assessing the performance of a portfolio manager. The mean return of his portfolio (gross of fees) is 27%, the standard deviation is 35%, and the mean return of the benchmark index is 18%. The portfolio's tracking error is *closest* to:

    A. 9.0%.
    B. 25.7%.
    C. 44.4%.

Correct Answer: A

Reference:
CFA Level I, Volume 1, Study Session 3, Reading 10, LOS-h.

Tracking error = Portfolio return(gross of fees) - Benchmark index return
= 27% - 18% = 9%

Tracking risk is the standard deviation of tracking error.

30. Which of the following statements is *least likely* correct regarding the p-value approach to hypothesis testing?

A. According to the p-value decision rule, reject H_o when p-value is $\geq \alpha$.
B. p-value is the smallest level of significance at which the null hypothesis can be rejected.
C. p-value is also known as marginal significance level and this approach is considered more efficient relative to the rejection points approach.

Correct Answer: A

Reference:
CFA Level I, Volume 1, Study Session 3, Reading 12, LOS-f.

Options B and C are correct.

- According to p-value decision rule, reject H_o when **p-value is** $< \alpha$.
- p-value is the smallest level of significance at which the null hypothesis can be rejected.
- p-value is also known as marginal significance level and this approach is considered more efficient relative to the rejection points approach.

Questions 31 through 42 relate to Economics

31. Suppose an individual's monthly demand for 100% natural cotton apparel is given by the equation: $Q_{cA}^{d} = 5 - 0.23P_c + 0.0006I + 0.11P_{SF}$ where, Q_{cA}^{d} equals number of clothing items demanded each month. I equals the individual's monthly income and P_{SF} equals price of synthetic cotton apparel. Suppose that the price of natural cotton apparel is $40, individual's income is $4,500 and the price of synthetic cotton apparel is $23. The income elasticity of demand for 100% natural cotton apparel is *closest* to:

    A. 1.03
    B. 2.62.
    C. 2.70.

    Correct Answer: B

    Reference:
    CFA Level I, Volume 2, Study Session 4, Reading 14, LOS-a.

    Insert the given values in the demand function:
    $Q_{cA}^{d} = 5 - 0.23P_c + 0.0006I + 0.11P_{SF}$
    $Q_{cA}^{d} = 5 - 0.23(40) + 0.0006(4{,}500) + 0.11(23) = 1.03$
    Income elasticity of demand $= \frac{\Delta Q_{cA}^{d}}{\Delta I} = 0.0006$
    Income elasticity $= \frac{\Delta Q_{cA}^{d}}{\Delta I} \times \frac{I}{Q_{cA}^{d}} = 0.0006 \times \frac{4{,}500}{1.03} = 2.62$
    Positive value of income elasticity implies that natural cotton apparel is normal good.

32. A change in technology will *most likely* cause a:

    A. shift in the supply curve.
    B. movement along the supply curve.
    C. shift in the supply and demand curve.

    Correct Answer: A

    Reference:
    CFA Level I, Volume 2, Study Session 4, Reading 14, LOS-c.

    A change in technology causes a shift in the supply curve.

33. Which of the following *most likely* represents the 'top dog' approach used by the leader in a 'Stackelberg model'?

    A. The leader firm overproduces to force the follower firms to scale back their production.
    B. The leader firm takes the first mover advantage by choosing its output before the follower firms.
    C. The leader firm determines its profit maximizing output by assuming no change in the follower firms' output.

    Correct Answer: A

    Reference:
    CFA Level I, Volume 2, Study Session 4, Reading 15, LOS-c.

    Option A is correct.

    In the Stackelberg model the leader firm can use "top dog" strategy. In the top dog strategy, the leader firm forces the follower firms to reduce production or to exit the market through aggressive overproduction.

    In a Stackelberg model, the leader firm chooses its output first because it has the first mover advantage.

34. When the demand for money balances increases without any change in interest rates and the money demand becomes infinitely elastic, the impact is *most likely* known as:

    A. liquidity trap.
    B. demand shock.
    C. quantitative easing.

    Correct Answer: A

    Reference:
    CFA Level I, Volume 2, Study Session 5, Reading 18, LOS-m.

    Liquidity trap occurs when money demand becomes infinitely elastic i.e. the demand for money balances increases without any change in interest rates and in extreme circumstances, the monetary policy becomes ineffective.

35. For a product that is considered to be a necessity, its price and total expenditure:

A. move in same direction.
B. move in opposite direction.
C. are not associated with each other.

Correct Answer: A

Reference:
CFA Level I, Volume 2, Study Session 4, Reading 12, LOS-m.

Demand for a necessity is considered to be relatively inelastic. For an inelastic demand, price and total expenditure move in the same direction.

When demand is elastic, price and total expenditure move in opposite direction.

However, if the demand is unitary inelastic, changes in price are not associated with changes in expenditure.

36. A decrease in which of the following factors causes the AD curve to shift rightward?

A. Taxes
B. Money supply
C. Bank reserves

Correct Answer: A

Reference:
CFA Level I, Volume 2, Study Session 5, Reading 16, LOS-h.

A decrease in taxes and an increase in both money supply and bank reserves causes a shift in the aggregate demand curve to the right i.e. causes an increase in aggregate demand.

37. A German company is expected to receive $25 million from a U.S. based client in 92 days. The company gathered the following information from a dealer in order to assist in hedging the foreign exchange risk.

Spot exchange rate $/€ = 1.38
One-month forward points = -15
Three-month forward points = -109

The firm could hedge the foreign exchange risk by:

A. buying €18.12 million (selling $25 million) at a forward rate of 1.3691.
B. buying €34.50 million (selling $25 million) at a forward rate of 1.3676.
C. selling €18.12 million (buying $25 million) at a forward rate of 1.3924.

Correct Answer: A

Reference:
CFA Level I, Volume 2, Study Session 6, Reading 20, LOS-e.

The German company will enter into a forward contract by buying €18.12 million ($25 million ÷ $/€1.38) and selling $25 million at a forward rate of 1.3691(1.38 – 109/10,000).

38. According to exhibit 1 (given below) up to how many units of labor, will the firm achieve increasing marginal returns?

Exhibit 1

Labor	Total Product	Average Product	Marginal Product
0	0	-	-
10	1,000	1,000	1,000
20	2,700	1,300	1,700
30	4,800	1,400	2,100
40	6,000	1,325	1,200
50	6,300	1,200	300

A. 30
B. 40
C. 50

Correct Answer: A

Reference:
CFA Level I, Volume 2, Study Session 4, Reading 14, LOS-k.

The firm will achieve increasing marginal returns up to 30 units of labor because the firm's marginal product is highest at 2,100 units. Beyond 30 labor units when more labor units are added, the firm's marginal product declines.

39. During the economic peak of a business cycle inflation *most likely*:

A. accelerates further.
B. picks up moderately.
C. decelerates with a lag.

Correct Answer: A

Reference:
CFA Level I, Volume 2, Study Session 5, Reading 17, LOS-a.

During economic peak of business cycle inflation further accelerates.

40. A dealer quotes following rates:

Spot exchange rate ($S_{USD/CAD}$)	= 0.89
Annual risk-free rate (USD)	= 5.25%
Annual risk-free rate (CAD)	= 3.25%

Suppose the domestic currency is CAD and dealer quote of the 12-month forward rate is ($F_{USD/CAD}$) 0.9172. As compared to the annual return on a domestic only investment, the annual return on the hedged foreign investment is:

A. 1.09% lower.
B. 1.12% lower.
C. 2.12% higher.

Correct Answer: B

Reference:
CFA Level I, Volume 2, Study Session 6, Reading 20, LOS-h.

Return on domestic investment (CAD$) = 3.25%

Hedged return on foreign investment (USD) = 2.1288% (calculated below)

Return on domestic investment is 1.1212% (3.25% – 2.1288%) higher than hedged return on foreign investment.

Hedged return on foreign investment:
Convert CAD into USD at spot exchange rate = $0.89
At the end of year, return earned in USD = 0.89 x (1+ 5.25%) = $0.9367
Convert USD into CAD at 12-month forward rate = $\frac{USD\ 0.9367}{\frac{USD}{CAD}\ X\ 0.9172} - 1 = 2.1288\%$

41. Which of the following statements is *least likely* correct regarding different profit measures?

A. Accounting profits are always greater than or equal to economic profits.
B. It is not necessary for a firm earning positive economic profit to have covered its opportunity cost of resources.
C. Maximum economic profit requires that i) MR = MC and ii) MC not be falling with output.

Correct Answer: B

Reference:
CFA Level I, Volume 2, Study Session 4, Reading 14, LOS-e.

B is the correct answer as statements presented in options A and C are correct.

Accounting profits are always greater than or equal to economic profits i.e. if implicit costs exist, accounting profit is greater than economic profit and in case implicit costs do not exist, accounting profits are equal to economic profits.

If a firm earns positive economic profit it means that the firm is able to generate profit greater than the opportunity cost of capital.

42. Which of the following is the *most* appropriate reason for hyperinflation?

A. Excess supply of goods during or after war times.
B. Increase in government spending without any increase in taxes.
C. Failure of central bank to increase money supply to support government spending.

Correct Answer: B

Reference:
CFA Level I, Volume 2, Study Session 5, Reading 17, LOS-e.

Hyperinflation occurs due to:

- Expansionary fiscal policy i.e. increase in government spending without any increase in taxes.
- Increase in supply of money by the central bank to support government spending.
- Shortage of supply of goods created during or after war, economic regime transition, or prolonged economic distress due to political instability.

Questions 43 through 60 relate to Financial reporting and Analysis

43. When a third party pays the suppliers of a company on its behalf, the firm's:

    A. investing cash inflows increase.
    B. financing cash inflows decrease.
    C. operating cash outflows increase.

    Correct Answer: C

    Reference:
    CFA Level I, Volume 3, Study Session 10, Reading 33, LOS-b.

    When a third party pays the suppliers on behalf of a company, the company reclassifies items from account payables to short-term loans and its:

    - operating cash outflow increases and
    - financing cash inflow increases.

    In subsequent periods, when the company pays back the third party, the payment is classified as a financing cash outflow.

44. When valuation allowance increases:

    A. net income remains unchanged.
    B. deferred income tax expense increases.
    C. reported deferred tax asset remains unchanged.

    Correct Answer: B

    Reference:
    CFA Level I, Volume 3, Study Session 9, Reading 30, LOS-g.

    When the valuation allowance increases:

    - Net income decreases.
    - Deferred income tax expense increases.
    - Reported net deferred tax asset decreases.

45. For a firm operating under U.S. GAAP, the future lease payments are *most likely* disclosed:

A. for the first year and then in aggregate for the next 2-5 years.
B. on a year-by-year basis for the first two years and in aggregate for all subsequent years.
C. on a year-by-year basis for the first five years and then aggregated for all subsequent years.

Correct Answer: C

Reference:
CFA Level I, Volume 3, Study Session 9, Reading 31, LOS-h.

For a firm operating under U.S. GAAP, the future lease payments are disclosed on a year-by-year basis for the first five years and then aggregated for all subsequent years.

46. Under both IFRS and U.S. GAAP, companies are required to disclose:

A. circumstances that resulted in inventory reversals.
B. accounting policies applied to inventory measurements.
C. amount of inventory recovery due to previous write down.

Correct Answer: B

Reference:
CFA Level I, Volume 3, Study Session 9, Reading 28, LOS-g.

Under both IFRS and U.S. GAAP, companies are required to disclose the accounting policies applied to inventory measurements.

Under U.S. GAAP reversals are not allowed therefore companies are not required to disclose circumstances for reversals or the amount of any reversal of any write-down.

47. A company's year-end net income is $5,255,200 and common shares outstanding are 325,000. The company paid $2,250,000 dividends on its 150,000 shares of convertible preferred and each share is convertible into 1.75 shares of its common stock. The company also paid after-tax interest of $71,250 on its $950,000 convertible bonds convertible into 52,000 shares. The company's diluted and basic EPS are *closest* to:

   A. $8.32 and $9.02 respectively.
   B. $8.33 and $9.25 respectively.
   C. $11.84 and $9.02 respectively.

   Correct Answer: B

   Reference:
   CFA Level I, Volume 3, Study Session 8, Reading 24, LOS-g.

	Basic EPS	Diluted EPS
Net Income	5,255,200	5,255,200
Preferred dividend	-2,250,000	-
After tax debt cost	-	+71,250
Numerator	**3,005,200**	**5,326,450**
Common shares outstanding	325,000	325,000
If preferred shares converted		+262,500
If debt converted		+52,000
Denominator	**325,000**	**639,500**
EPS	**9.25**	**8.33**

48. Under U.S. GAAP companies are:

   A. permitted to use only the revaluation model to report identifiable intangible assets.
   B. not allowed to capitalize the costs associated with internally created intangible assets.
   C. allowed to report identifiable intangible assets either using cost model or revaluation model.

   Correct Answer: B

   Reference:
   CFA Level I, Volume 3, Study Session 8, Reading 25, LOS-e.

Under U.S. GAAP companies are:

- permitted to use only the **cost model** to report identifiable intangible assets.
- not allowed to capitalize the costs associated with internally created intangible assets.

49. Management's commentary *must*:

    A. provide an overview of specific business lines.
    B. highlight uncertainties that may affect the liquidity position of the company.
    C. provide information regarding the accounting methods and policies used by management in developing financial statements.

Correct Answer: B

Reference:
CFA Level I, Volume 3, Study Session 7, Reading 21, LOS-c.

Option B is correct.

- **Management discussion and analysis (MD&A)** also known as **management commentary** *must* highlight any favorable or unfavorable trends and identify significant events and uncertainties that affect the company's liquidity, capital resources and results of operations.
- **Supplementary schedules** provide an overview about specific business lines.
- **Footnotes** provide information about the accounting methods and policies used by the management in developing financial statements.

50. A firm purchases a piece of land for operating purposes on January 1st 2012 for \$52,000. The land's fair value is determined to be \$53,500 at the end of 2012 and \$42,700 at the end of 2013. If the firm uses the revaluation model, under IFRS, the firm will *least likely* report a:

    A. loss of \$9,300 in its income statement at the end of year 2013.
    B. revaluation surplus of \$1,500 in the equity section at the end of year 2012.
    C. revaluation loss of \$10,800 in other comprehensive income at the end of year 2013.

Correct Answer: C

Reference:
CFA Level I, Volume 3, Study Session 9, Reading 29, LOS-g.

At the end of year 2012, asset value has increased $1,500. The company's balance sheet will show the asset at a value of $53,500. The $1,500 increase will appear in other comprehensive income and be accumulated in equity under the heading of revaluation surplus.

At the end of year 2013, the company's balance sheet will show the asset's value at $42,700. Of the total $10,800 ($53,500 – $42,700) decrease in asset value $1,500 will reduce the revaluation surplus in the equity section and the remaining $9,300 will be shown as a loss in the income statement.

51. In periods of falling prices and assuming no liquidation, LIFO reports the lowest:

    A. income taxes.
    B. ending inventory.
    C. cost of goods sold.

Correct Answer: C

Reference:
CFA Level I, Volume 3, Study Session 8, Reading 24, LOS-d.

In periods of falling prices and assuming no liquidation LIFO reports the lowest cost of goods sold and the highest net income and ending inventory. Highest net income also results in highest income tax payment.

52. An analyst observed that the demand of Lynch Inc., a manufacturing firm has decreased, the company has relatively newer assets and the company is not making full use of its available credit lines. Based on these facts, which of the following ratios of Lynch Inc. would *most likely* be lower as compared to industry averages?

    A. Payables turnover ratio
    B. Fixed asset turnover ratio
    C. Receivables turnover ratio

Correct Answer: B

Reference:
CFA Level I, Volume 3, Study Session 8, Reading 27, LOS-c.

Option B is correct. As the company has newer assets its fixed asset turnover may be lower than average. There is not enough data regarding company's payables and receivables to draw any conclusion.

53. The elements directly related to measurement of financial position *most likely* include:

A. equity.
B. income.
C. capital maintenance adjustments.

Correct Answer: A

Reference:
CFA Level I, Volume 3, Study Session 7, Reading 23, LOS-d.

The elements directly related to measurement of financial **position** are:

- Assets
- Liabilities
- Equity

The elements directly related to measurement of financial **performance** are:

- Income
- Expenses
- Capital maintenance adjustments

54. An analyst gathered the following data from a company's financials:

FFO	\$50 million
WC changes	\$18 million
Dividends	\$7 million
Total debt	\$78 million

He obtained retained cash flow (RCF) by deducting WC changes and dividends from cash flow from operations. Assuming no capital expenditures, the company will be able to pay off its debt from cash retained in the business in approximately:

A. 4.0 months.
B. 1.5 years.
C. 3.0 years.

Correct Answer: C

Reference:
CFA Level I, Volume 3, Study Session 10, Reading 33, LOS-c.

Assuming no capital expenditures, a ratio of Total debt/RCF indicates that the company will be able to pay off its debt in approximately 3 years as calculated below:

$\frac{Total\ debt}{Retained\ cash\ flow}$ = \$78 million/\$25 million
= 3.12 years

Retained cash flow (RCF) = FFO - ΔWCC – Dividends
= \$50 million - \$18 million - \$7 million
= \$25 million.

55. In periods of falling prices and increasing inventory quantities the operating profit of a firm using the weighted average cost method will be:

A. lower compared to a firm using the FIFO method.
B. higher compared to a firm using the LIFO method.
C. indeterminate between LIFO and FIFO methods due to increasing inventory quantities.

Correct Answer: C

Reference:
CFA Level I, Volume 3, Study Session 9, Reading 28, LOS-e.

In periods of falling prices and constant or increasing inventory quantities gross profit, operating profit or net income of a firm using weighted average cost of method will be higher than the firm using FIFO method and will be lower than the firm using LIFO method.

56. When a company writes off its uncollectible receivables, the accounting treatment *most likely* includes a decrease in:

A. cash and an increase in the allowance for doubtful accounts.
B. account receivable and the allowance for doubtful accounts.
C. the allowance for doubtful accounts and the cash, and no change in the accounts receivables.

Correct Answer: B

Reference:
CFA Level I, Volume 3, Study Session 8, Reading 25, LOS-e

When a company writes off its uncollectible receivables, the accounts receivable and the allowance for doubtful accounts are decreased by the amount of uncollectible receivables.

57. For an analyst interested in the ratio analysis of a diversified company, it is *more appropriate* to:

    A. use industry specific ratios for different lines of business.
    B. use the weighted average ratios of the respective industries.
    C. avoid comparing the company's ratios with industry averages.

Correct Answer: A

Reference:
CFA Level I, Volume 3, Study Session 8, Reading 25, LOS-i.

For diversified companies it is more appropriate to use industry specific ratios for different lines of business.

58. Compared to an operating lease, a lessee that makes use of a finance lease will *most likely* report higher:

    A. total net income.
    B. operating income.
    C. cash flows from financing.

Correct Answer: B

Reference:
CFA Level I, Volume 3, Study Session 9, Reading 31, LOS-h.

Compared to an operating lease, a lessee that makes use of a finance lease reports higher operating income (EBIT); this is because, with respect to finance leases, only depreciation expense is treated as an operating expense whereas in operating leases the entire lease payment is treated as an operating expense.

59. An analyst is comparing the financials of two firms given below:

Firm:	Reporting Standard:	Available for sale debt securities Gains/losses:	
ABC	IFRS	$6,000 gain	(from exchange rate)
XYZ	U.S GAAP	$4,500 loss	(from exchange rate)

In order to adjust the income statements, the analyst will *most likely* report:

A. $4,500 loss for XYZ.
B. $6,000 gain for ABC.
C. $1,500 gain for ABC.

Correct Answer: A

Reference:
CFA Level I, Volume 3, Study Session 10, Reading 33, LOS-e.

In order to compare the income statements of both firms, the analyst will either remove $6,000 gain from ABC's income statement or report $4,500 loss in XYZ's income statement.

Under IFRS exchange rate gain/loss from available for sale debt securities is reported in the income statement.

Under U.S. GAAP exchange rate gain/loss for available for sale debt securities is not recognized in the income statement.

60. Cruz Corp. reported $52,480 as salary expense and $22,000 as other operating expenses for the year ended December 2013. If the beginning and ending salaries payable are $38,500 and $22,670 respectively, the cash paid to the employees by Cruz Corp. is *closest* to:

A. $36,650.
B. $46,310.
C. $68,310.

Correct Answer: C

Reference:
CFA Level I, Volume 3, Study Session 8, Reading 26, LOS-e.

Salaries expense	= \$52,480
Plus: Decrease in salaries payable	= \$15,830
Cash paid to employees	**= \$68,310.**

Decrease in salaries payable	= End. salaries payable –Beg. salaries payable = \$22,670 – \$38,500 = \$15,830

Questions 61 through 72 relate to Corporate Finance

61. Greek Lime Inc. is a small firm currently operating in Ohio and is planning a new project in Illinois. The CEO of the firm gathered the following data to estimate the project's cost of capital:

	Comparable Public Firm	Greek Lime Inc.'s Project
Market value of debt	\$220 m	\$82 m
Market value of equity	\$340 m	\$145 m
Marginal tax rate	36%	34%
Beta	1.7	

The asset beta of Greek Lime Inc. is *closest* to:

A. 1.20.
B. 1.65.
C. 2.33.

Correct Answer: A

Reference:
CFA Level I, Volume 4, Study Session 11, Reading 36, LOS-i

To calculate the asset beta β_a, un-lever the comparable company beta by using its marginal tax rate and debt-to-equity ratio.

$$\beta_a = \frac{Beta\ of\ comparable\ firm}{1+\{(1-T)\times Debt/Equity\}} = \frac{1.7}{1+\{(1-36\%)\times 220/340\}} = 1.2$$

62. A company will not be able to use higher degrees of financial leverage if its:

A. ratio of tangible assets to total assets is lower.
B. ratio of long term debt to total debt is higher.
C. sensitivity of revenues to business cycle is below average.

Correct Answer: A

Reference:
CFA Level I, Volume 4, Study Session 11, Reading 37, LOS-b.

Two factors affect a company's ability to use higher degree of financial leverage:

I. Tangible assets-to-total assets
II. Sensitivity of revenues to business cycle

Higher ratios of tangible assets-to-total assets and below average sensitivity of revenues to business cycle increase a firm's ability to use higher degree of financial leverage.

63. The following data is related to Peyton Brick Inc. for the year ended June 2012.

Total units sold	= 52,000
Sale price (per unit)	= $80
Variable cost (per unit)	= $32
Fixed operating costs	= $1.5 m
Interest paid	= $600,000

The number of units Peyton sold beyond its breakeven quantity Q_{BE} is *closest* to:

A. 8,250.
B. 20,750.
C. 43,750.

Correct Answer: A

Reference:
CFA Level I, Volume 4, Study Session 11, Reading 37, LOS-d.

The units at which the firm breakeven $Q_{BE} = \frac{1{,}500{,}000+600{,}000}{80-32} = 43{,}750$

The firm has sold 8,250 (52,000 – 43,750) units more than its break even level.

64. Which of the following is *least likely* a limitation of the average accounting rate of return?

A. It is not adjusted for risk.
B. It ignores time value of money.
C. It requires complex calculations.

Correct Answer: C

Reference:
CFA Level I, Volume 4, Study Session 11, Reading 35, LOS-d.

Options A and B represent correct limitations of the average accounting rate of return. Option C is incorrect. Average accounting rate of return is easy to understand and easy to calculate.

65. An investment of 5,000 will create a perpetual after-tax cash flow of $750. The required rate of return is 10%. Calculate the investment's profitability index?

A. 0.15
B. 1.0
C. 1.5

Correct Answer: C

Reference:
CFA Level I, Volume 4, Study Session 11, Reading 35, LOS-d.

The present value of future cash flows = $\frac{750}{0.10} = 7{,}500$
The profitability index = PI = $\frac{PV}{Investment} = \frac{7{,}500}{5{,}000} = 1.5$

66. Which of the following statements is *most likely* correct regarding the structure and composition of a company's board of directors?

A. In two-tier structures, the supervisory and management boards are independent from each other.
B. A one-tier structure consists of a single board of directors, composed of non-executive directors only.
C. Two-tier structure consists of two separate boards, i) limited liability directors (executives) & ii) unlimited liability directors (non-executives).

Correct Answer: A

Reference:
CFA Level I, Volume 4, Study Session 11, Reading 34, LOS-e.

A one-tier structure consists of a single board of directors, composed of executive and non-executive directors.

A two-tier structure composed of two separate boards, a supervisory board (non-executive) and a management (executive) board. The supervisory and the management board are independent from each other.

67. MaryMore Inc. is planning to issue bonds to finance a new project. It offers $1,000 par 5-year, 7% semi-annual coupon payment bond. The bond is currently trading at $1,150. The firm's current costs of preferred equity and common equity are 4% and 5.5% respectively and marginal tax rate is 34%. The firm's project cost is *closest* to:

A. 2.43%.
B. 3.68%.
C. 11.93%.

Correct Answer: A

Reference:
CFA Level I, Volume 4, Study Session 11, Reading 36, LOS-b.

Firm is planning to finance new project by issuing bonds. The interest cost of the bond (under yield-to-maturity approach) can be calculated as:

FV = 1000 PV = 1150 PMT = 7/2 = 3.5% x 1000 = 35 N = 5 x 2 = 10
Calculate i = 1.843 x 2 = 3.6875%

After tax interest cost of the new project is 2.43 (3.68 x (1-34%)).

68. Debt is generally:

A. less costly than preferred or common stock.
B. more costly than preferred or common stock.
C. less costly than preferred stock but more costly than common stock.

Correct Answer: A

Reference:
CFA Level I, Volume 4, Study Session 11, Reading 35, LOS-a.

Debt is generally less costly than preferred or common stock.

69. Hodges Corporation is planning to raise \$12 million new capital while maintaining the current capital structure of the firm which is 35% debt, 8% preferred stock and the rest is equity. The company's before tax cost of debt is 9%, cost of preferred stock is 11%, and cost of equity is 16%. If the company's weighted average cost of capital is 12.05%, its marginal tax rate is *closest* to:

A. 35.0%
B. 40.0%
C. 45.5%

Correct Answer: A

Reference:
CFA Level I, Volume 4, Study Session 11, Reading 35.

WACC = debt% x debt cost (1-tax rate) + Preferred stock % x cost of preferred stock + Equity% x cost of equity

$0.1205 = (0.35)(0.09)(1\text{-Tax}) + (0.11)(0.08) + (0.57)(0.16)$
$0.1205 = 0.0315(1\text{-X}) + 0.0088 + 0.0912$
$0.1205 = 0.0315 – 0.0315X + 0.10$
$0.0315X = 0.0110$

$X = 0.0110/0.0315 = 0.3492 \approx 35\%$

Company's marginal tax rate = 35%

70. Granville Audet is evaluating Homego Store, Inc. over the fiscal years 2014 to 2017 and has complied the following information.

Exhibit

	2014	**2015**	**2016**	**2017**
Current ratio	1.8	1.6	1.4	1.3
Quick ratio	0.2	0.3	0.5	0.5
No. of days of inventory	32	31	29	27
No of days of payables	36	39	41	42

Granville observed that the company's current ratio has declined yet quick ratio has improved and is trying to find possible reasons which may drive that change.

Which of the following is most likely a possible reason for Granville concern?

A. Company is taking longer to pay its suppliers
B. Credit worthiness of Homego customers is deteriorating
C. Homego's inventory management system has improved

Correct Answer: C

Reference:
CFA Level I, Volume 4, Study Session 11, Reading 37.

C is correct. One possible reason for lower current ratio ($\frac{current\ assets}{current\ liabilities}$) and higher quick ratio ($\frac{current\ assets - inventories}{current\ liabilities}$) is that Homego's inventory management has improved resulting in lower inventory and lower current ratio.

A is incorrect as account payables will affect quick ratio and current ratios in a similar manner.

B is incorrect as account payables will affect quick ratio and current ratio in a similar manner.

71. C-Green Inc. recently issues a bond to finance its new project. The bond sells at $1,120 and offers 5-year, $1,000 face value, 3.5 percent semi-annual coupon bond. C-Green's marginal tax rate is 35.5%.

Michelle Vick, a management accountant at C-Green Inc., has been asked by her finance director to calculate the C-Green's after-tax cost of debt using the yield-to-maturity approach.

C-Green's after-tax cost of debt is *closest* to:

A. 1.91%
B. 2.96%
C. 5.37%

Correct Answer: A

Reference:
CFA Level I, Volume 4, Study Session 10, Reading 35.

FV = 1,000
PV = 1,120
PMT = 17.5 = $(\frac{3.5\%}{2} \times 1000)$
N = 5x2 = 10
I = 1.4792 = 2.96%

C-Green's after-tax cost of debt is 0.0296(1- 0.355) = 1.91%

72. Aiden Daglish, CFA is asked to evaluate the following options in terms of lower cost of credit for borrowing $3,000,000 for one month.

- A banker's acceptance at 6.8 percent, an all-inclusive rate.
- Commercial paper at 6.2 percent with a dealer's commission of 1/8 percent and backup line cost of 1/6 percent, both of which would be assessed on the $3 million of commercial paper issued.

Which of the following statements is *most likely* correct?

A. commercial paper cost is 256 basis points lower than banker's acceptance cost.
B. commercial paper cost is 33 basis points lower than banker's acceptance cost.
C. banker's acceptance cost is 29 basis points higher than commercial paper cost.

Correct Answer: C

C is correct. banker's acceptance cost is 6.83 percent and commercial paper cost is 6.54 percent. Banker's acceptance cost is 0.29 percent (or 29 basis points) higher than commercial paper cost.

Banker's acceptance cost = $\frac{Interest}{Net\ Proceeds} \times 12 = \frac{0.068 \times \$3{,}000{,}000 \times {}^{1}/_{12}}{\$3{,}000{,}000 - \left(0.068 \times \$3{,}000{,}000 \times {}^{1}/_{12}\right)} \times 12 = 6.83\%$

Commercial paper cost = $\frac{Interest + Dealer's commission + Backup\ cost}{Net\ proceeds} \times 12 =$

$\frac{\left(0.062 \times \$3{,}000{,}000 \times {}^{1}/_{12}\right) + \left(0.0013 \times \$3{,}000{,}000 \times {}^{1}/_{12}\right) + \left(0.0017 \times \$3{,}000{,}000 \times {}^{1}/_{12}\right)}{\$3{,}000{,}000 - \left(0.062 \times \$3{,}000{,}000 \times {}^{1}/_{12}\right)} \times 12 =$ 6.54%

Questions 73 through 85 relate to Equity Investments

73. When a market is semi-strong form inefficient current security prices:

    A. reflect information of company specific events.
    B. do not reflect information regarding financial market.
    C. incorporate past information about prices and volumes.

    Correct Answer: B

    Reference:
    CFA Level I, Volume 5, Study Session 13, Reading 46, LOS-d.

    When a market is semi strong form inefficient the security prices do not reflect information on financial market data and traders can earn profits.

    Option A is incorrect because if market is semi-strong form efficient then it will reflect information about company specific events.

    Option C is incorrect because if a semi strong form inefficient market is also weak form inefficient then it will not reflect past information regarding securities prices and their volumes.

74. A trader who purchases a global registered share will *most likely*:

    A. not need to be concerned with currency conversions.
    B. be able to track the performance of the underlying index.
    C. have an indirect, economic interest in a foreign company.

    Correct Answer: A

    Reference: CFA Level 1, Volume 4, Study Session 14, Reading 47, LOS e

    A trader who purchases a global registered share need not be concerned with currency conversions as the same share is quoted and traded in different currencies.

75. A firm that has compromised its current profitability to achieve a major market share is *most likely* using:

A. offensive pricing.
B. defensive pricing.
C. predatory pricing.

Correct Answer: C

Reference:
CFA Level I, Volume 5, Study Session 14, Reading 48, LOS-k.

When a company uses offensive pricing to drive its competitors out of the business by compromising its near term profitability (with the hope to increase prices in future), it is referred to as ***Predatory Pricing.***

76. A group of investors purchased 3 million shares of Buddies Inc., a publicly traded corporation, at a price of $14 per share. The shares are trading in the market for $20. The firm needs proceeds on an urgent basis for expansion purposes. This is *most likely* an example of a:

A. PIPE transaction.
B. leveraged buyout.
C. venture capital investment.

Correct Answer: A

Reference:
CFA Level I, Volume 5, Study Session 14, Reading 47, LOS-c.

In PIPE (private investment in public company), a public company offers securities to private equity investors at a discount to prevailing market price. The discount depends on the urgency of the needs of the funds and the size of the capital requirement.

77. An investor owns 2-year duration credit default swap (CDS) of Greenz Inc. He asked an analyst how his investment will perform if market interest rates remain the same, but the credit spread of the firm widens.

The *most reasonable* response of the analyst to the investor would be that:

A. you may benefit from an increase in the company's credit spread.
B. your investment value will decrease as the default probability of the firm will increase.
C. there will be no change in your investment value as CDS provides protection against firm's credit spread widening.

Correct Answer: A

Reference:
CFA Level I, Volume 5, Study Session 13, Reading 44, LOS-e.

Credit default swaps are insurance contracts that promise payment of principal to the buyer in the event company defaults on his bond. As the credit spread of the firm widens, the chances of defaults increases, which in turn increases the value of the CDS to its buyer.

78. An analyst gathered the following information for an index with the initial value set to 100.

Period	Price Return	Income Return
1	6.2%	1.5%
2	4.7%	2.5%
3	5.5%	3.0%

The value of the total return index at the beginning of period 3 is *closest* to:

A. 115.45.
B. 123.40.
C. 125.27.

Correct Answer: A

Reference:
CFA Level I, Volume 5, Study Session 13, Reading 45, LOS-b.

Index values calculation over multiple time periods requires geometrically linking the series of returns. The values of price return of the index for period 1, 2 and 3 are as follows:

Period	Total Return	Calculation	Ending value
1	7.7%	100(1.077)	107.70
2	7.2%	107.70(1.072)	**115.45**
3	8.5%	115.45(1.085)	125.26

79. According to efficient market hypothesis:

A. investors may have heterogeneous beliefs regarding asset values.
B. analysts assess future probabilities on the basis of recent outcomes.
C. abnormal returns are due to some statistical problems with analyzing the stocks.

Correct Answer: C

Reference:
CFA Level I, Volume 5, Study Session 13, Reading 46, LOS-g.

Option C is correct. According to efficient market hypothesis abnormal stock returns are either by chance or due to some statistical problems associated with analyzing the stock returns.

Option A in incorrect. According to behavioral finance, investors are irrational and imperfect and as a result may have heterogeneous beliefs about asset values.

Option B is incorrect. In gambler's fallacy investors assess future probabilities on the basis of recent outcomes.

80. Information about the arrangement of the final settlement of the trade are found under:

A. validity instructions.
B. clearing instructions.
C. execution instructions.

Correct Answer: B

Reference:
CFA Level I, Volume 5, Study Session 13, Reading 44, LOS-g.

Execution instructions indicate how to fill the order.

Validity instructions indicate when the order may be filled.

Clearing instructions indicate how to arrange the final settlement of the trade.

81. GFR Corp. would like to submit a large buy order via a trading venue with minimal regulatory authority exercised over its subscribers. The company would like to conceal the identity of its order due to the size of the issue and, at the same time, minimize execution uncertainty.

The financial intermediary *most* suitable for issuing shares is a (n):

A. exchange.
B. block broker.
C. alternative trading system (ATS).

Correct Answer: C

Reference:
CFA Level 1, Volume 4, Study Session 14, Reading 44, LOS d

Greenwich Corp. should issue its shares using an ATS; this is because these are trading venues that function like exchanges but do not exercise regulatory authority over their subscribers except with respect to the conduct of trading in the system. In addition, many ATS are known as dark pools as they do not display the orders that their clients send to them; this will allow Greenwich Corp to conceal the identity of its buy order.

An exchange is not a suitable trading venue due to regulations imposed on traders such as requiring issuers to list their securities on the exchange.

A block broker is unsuitable as a financial intermediary because they carefully manage the exposures entrusted to them which makes filling them difficult thereby increasing execution uncertainty.

82. An analyst gathered the following data for an equally weighted index.

Security	Beginning period		Ending Period	
	Price	Shares	Price	Shares
A	10	100	12	100
B	18	180	17	180
C	25	250	21	250

The index return over the period is *closest* to:

A. -5.66%.
B. -1.55%.
C. -0.52%.

Correct Answer: C

Reference:
CFA Level I, Volume 5, Study Session 13, Reading 45, LOS-k.

$\%\,\Delta\, in\, price\, of\ A = \frac{12-10}{10} = 20\%$

$\%\,\Delta\, in\, price\, of\ B = \frac{17-18}{18} = -5.56\%$

$\%\,\Delta\, in\, price\, of\ C = \frac{21-25}{25} = -16\%$

$$\frac{\%\,\Delta\, in\, price\, of\ A + \%\,\Delta\ in\, price\, of\ B + \%\,\Delta\ in\, price\, of\ C}{3} =$$

$\frac{20\% - 5.56\% - 16\%}{3} = -0.52\%$

83. The return on equity and expected payout ratio of a firm is 14% and 30% respectively while investor's required return is 15%. Based on the information provided, the price-to-earnings multiple for the firm is *closest* to:

A. 0.46.
B. 2.78.
C. 5.76.

Correct Answer: C

Reference:
CFA Level I, Volume 5, Study Session 14, Reading 49, LOS-g.

P/E = $\frac{expected\ payout}{r-g} = \frac{0.3}{0.15-0.098} = 5.76$
where g = ROE x (1 - expected payout) = 14% x (1-0.30).

84. A share of ELY Inc. is currently trading for $87. An analyst calculated the estimated intrinsic value of ELY Inc.'s share to be $102.67 by using the following data:

Most recent dividend D_o = $5.5
Growth rate g = 12%
Required return = 18%

The contribution of the dividend growth assumption to the intrinsic value estimate is *closest* to:

A. $15.67.
B. $30.55.
C. $72.11.

Correct Answer: C

Reference:
CFA Level I, Volume 5, Study Session 14, Reading 49, LOS-d.

The contribution due to dividend growth assumption to the intrinsic value estimate is:

102.67 – (5.5/0.18) = 72.11

85. Robert Romero recently joined SProfits Mutual Fund. The investment policy of SProfits allow the fund to invest only in traditional equity investment markets. Which of the following is a suitable investment for SProfits Mutual Fund?

A. venture capital fund
B. five-year government treasury notes
C. shares of a public company that trades only through dealers

Correct Answer: C

Traditional equity investments include publicly traded equities and shares in pooled investment vehicles that hold publicly traded equities. Equity shares that are publicly traded through dealers are part of secondary markets.

B is incorrect. The investment policy of SProfits does not allow debts.

C is incorrect. Venture capital investment is included in alternative investment market.

Questions 86 through 92 relate to Derivatives

86. In inefficient markets, arbitrage opportunities:

    A. does not exist.
    B. are quickly eliminated
    C. exist for significant length of time

    Correct Answer: C

    Reference:
    CFA Level I, Volume 6, Study Session 17, Reading 56.

    In relatively efficient markets, arbitrage opportunities are either nonexistent or are quickly eliminated. However, in case of inefficient markets, arbitrage opportunities often exist for any significant length of time and some investors consistently capture them.

87. An analyst made the following statements.

    Statement 1: Sellers of options in both exchange traded and OTC markets are not subject to the risk of default of buyers.
    Statement 2: In contrast to forwards, futures and swaps, options do have value at the start.

    The analyst is *most likely* correct with respect to:

    A. Statement 1 only.
    B. Statement 2 only.
    C. Statement 1 and Statement 2.

    Correct Answer: C

    Reference:
    CFA Level I, Volume 6, Study Session 17, Reading 56, LOS-c.

    Both statements made by the analyst are correct.

    Sellers of options in both exchange-traded and OTC markets are not subject to the risk of default of buyers.

    In contrast to forwards, futures and swaps, options do have value at the start.

88. As compared to over the counter derivatives, exchange traded derivatives are:

A. more private and less regulated
B. less customized and less flexible.
C. subject to a greater risk of default.

Correct Answer: B

Reference:
CFA Level I, Volume 6, Study Session 17, Reading 56, LOS-a.

<u>*Exchange traded derivatives*</u> are standardized, highly regulated and are guaranteed against default through the clearinghouse.

<u>*Over the counter derivatives*</u> are customized, flexible and more private and less regulated.

89. In asset back securities (ABSs), which of the following tranches have the lowest expected returns?

A. Senior tranches.
B. Junior tranches.
C. Mezzanine tranches.

Correct Answer: A

Reference:
CFA Level I, Volume 6, Study Session 17, Reading 56, LOS-a.

The expected returns of the tranches in ABSs vary according to the perceived credit risk, with the senior tranches having the highest credit quality and the junior the lowest. Therefore, senior tranches have the lowest expected returns and the junior tranches have the highest.

90. Which of the following statements is *most likely* correct for a 3 × 9 FRA?

A. The contract will expire in 270 days.
B. The underlying rate will be 180 day LIBOR.
C. The underlying loan will be settled in 90 days.

Correct Answer: B

Reference:
CFA Level I, Volume 6, Study Session 17, Reading 57, LOS-e.

For a 3 × 9 FRA, the contract will expire in 90-days, the underlying loan will be settled in 270-days. The underlying rate will be 180-LIBOR.

91. At expiration, a European put option will not be worthless if the exercise price is:

    A. equal to the underlying price
    B. less than the underlying price.
    C. greater than the underlying price.

Correct Answer: C

Reference:
CFA Level I, Volume 6, Study Session 17, Reading 57, LOS-o.

C is correct. At expiration, a European put option will be worthless if the exercise price is equal to or less than the exercise price.

92. A portfolio manager is buying a put option to hedge a stock position. He gets the following price quotations from a dealer:

    - A call option on the underlying with an exercise price of $50 and time to expiration of 3 months costs $9.50.
    - A bond with a face value of $50, offering no coupon, expires in 3 months.
    - The current price of the underlying is $52.
    - The risk-free rate is 3.0%.

If a put option on the same underlying with an exercise price of $50 and time to expiration of 3 months costs $7.00, the option is *most likely*:

    A. overpriced.
    B. underpriced.
    C. correctly priced.

Correct Answer: B

Reference
CFA Level I, Volume 6, Study Session 17, Reading 59, LOS-b.

B is correct. The option selling for $7.00 is underpriced.

Given put-call parity, the price of the put option should equal:
Put option: long call, short asset, long bond
$= 9.50 + (50/(1.03)^{3/12}) - 52$
$= \$7.1318$

Questions 93 through 105 relate to Fixed income

93. A 7-year 6% annual coupon payment bond priced at 100 of par value is trading in the market for 103. The modified duration and convexity of the bond is 6.5 and 86 respectively. The approximate return impact on the bond from 150 basis points spread widening is *closest* to:

    A. -7.8%
    B. -8.78%.
    C. -9.75%.

    Correct Answer: B

    Reference:
    CFA Level I, Volume 5, Study Session 16, Reading 55, LOS-i.

    Return impact≅ - (duration x change in spread) + ½ Convexity x (change in spread)^2

    Return impact ≅ - (6.5 x 0.015) + ½ × 86 x (0.015)^2 = -8.78

94. An investor is choosing between two money market instruments of the same credit risks.

    i. 180-day commercial paper at a discount rate of 7.85% for 360-day year.
    ii. 180-day bank time deposit quoted at an-add on rate of 8.15% for 365-day year.

    He will *most likely* choose:

    A. bank time deposit as it offers 10 bps more in annual return than commercial paper.
    B. commercial paper as it offers 13 bps more in annual return than bank time deposit.
    C. bank time deposit as it offers 30bps more in annual return than commercial paper.

    Correct Answer: B

    Reference:
    CFA Level I, Volume 5, Study Session 15, Reading 53, LOS-f.

First calculate the price of commercial paper:

[1-180/360 x 0.0785] x 100 = 96.075

Second, solve for the add on rate (AOR) for 365-day year:
{365/180} x $\{\frac{100-96.075}{96.075}\}$ = 8.28%

As the risks are same therefore commercial paper offers 13 basis points (8.28 - 8.15) more in annual return than the bank time deposit.

95. Constant yield price trajectory illustrates:

    A. that there is a constant change in price of a fixed income bond as time passes.
    B. how the bond prices remain constant as time passes when market discount rates remain the same.
    C. the pull to par effect on bond price trading at a premium or discount to par value.

Correct Answer: C

Reference:
CFA Level I, Volume 5, Study Session 15, Reading 52, LOS-b.

The constant-yield price trajectory illustrates the change in price of fixed income bond overtime. This trajectory shows the pull to par effect on the price of a bond trading at a premium or discount to par value.

96. When a national government runs a budget deficit, the primary source of funds for making interest payments and repaying the principal for sovereign bonds are:

    A. excess tax revenues over expenditures.
    B. borrowing funds from interbank market.
    C. rolling over existing debt into new debt.

Correct Answer: C

Reference:
CFA Level I, Volume 5, Study Session 15, Reading 51, LOS-e.

For sovereign bonds:

- When a national government runs a budget deficit, the primary source of funds for making interest payments and repaying the principal are from rolling over existing debt into new debt.

- When a national government runs a budget surplus, excess tax revenues over expenditures is the primary source of funds for making interest payments and repaying the principal.

97. Callable but can be called every October 10 one year from now till maturity.

    The call provision is *most likely* a (n):

    A. Bermuda call.
    B. European call.
    C. American call.

    Correct Answer: A

    Reference:
    CFA Level I, Volume 5, Study Session 15, Reading 50, LOS-f.

    In Bermuda style call, the issuer has the right to call bonds on specified dates following the call protection period.

98. Which of the following statements is *most likely* correct regarding credit spreads?

    A. During financial crises, a flight to quality can cause benchmark yields to rise.
    B. More thinly traded corporate bonds have much narrower difference between the bid and offer prices.
    C. An unexpected credit downgrade on a corporate bond can result in greater credit as well as liquidity risk.

    Correct Answer: C

    Reference:
    CFA Level I, Volume 5, Study Session 16, Reading 54, LOS-k.

Options A and B are incorrect and option C is correct.

- During financial crises, a flight to quality can cause government benchmark yields to **fall** as credit spreads widen.
- More thinly traded corporate bonds have much **wider** difference between the bid and offer prices.
- An unexpected credit downgrade on a corporate bond can result in greater credit as well as liquidity risk.

99. Which of the following source of financing is *least expensive* for a highly rated company?

    A. Bilateral loan
    B. Syndicated loan
    C. Bond issued in financial market.

    Correct Answer: C

    Reference:
    CFA Level I, Volume 5, Study Session 15, Reading 51, LOS-f.

    For highly rated companies both bilateral and syndicated loans are more expensive than bonds issued in financial markets.

100. An investor purchased a 2-year bond at 1,050 with par value of 1,000 in a country, which lacks an issue premium tax provision in its tax code. He has not paid or deducted any tax on that bond for two years. When the bond is redeemed at maturity he can:

    A. declare a capital loss of 50.
    B. declare a capital gain of 50.
    C. deduct 25 from his taxable income for year-2 only.

    Correct Answer: A

    Reference:
    CFA Level I, Volume 5, Study Session 15, Reading 50, LOS-d.
    Since the country's tax code lacks any issue premium tax provision, the investor will not make any deductions to its taxable income and instead declare a capital loss of 50 when the bond is redeemed at maturity.

101. The internal rate of return on the cash flows assuming the payments are made on the scheduled dates is referred to as:

A. true yield.
B. street convention.
C. government equivalent yield.

Correct Answer: B

Reference:
CFA Level I, Volume 5, Study Session 15, Reading 52, LOS-f.

The internal rate of return on the cash flows assuming the payments are made on the scheduled dates is referred as street convention.

102. A bond portfolio consists of following three fixed rate bonds trading in different markets.

	Time-to-maturity (years)	**Coupon**	**Yield-to-maturity**
Bond A	6	7%	9
Bond B	4	8%	10
Bond C	5	5%	10

The bond with the *lowest* convexity would be:

A. bond A.
B. bond B.
C. bond C.

Correct Answer: B

Reference:
CFA Level I, Volume 5, Study Session 16, Reading 54, LOS-g.

Option B is correct. The factors that lead to lowest convexity are the same as for duration. The convexity will be lower for a bond with shorter time-to-maturity, a higher coupon rate and a higher yield-to-maturity.

103. Which of the following bond structures attracts the more conservative classes of investors?

A. Putable bond
B. Callable bond
C. Option-free bond

Correct Answer: A

Reference:
CFA Level I, Volume 5, Study Session 15, Reading 50, LOS-f.

Putable bonds attract more conservative classes of investors (who want to protect themselves against major decline in bond prices) because they provide first class claim into cash before other creditors.

104. At the time of financial crises banks:

A. reduce funding to other banks as interbank deposits are unsecured.
B. increase funding to other banks and hoard less liquidity in anticipation of expected payoffs.
C. increase interbank funding as corporations' use of credit lines decrease.

Correct Answer: A

Reference:
CFA Level I, Volume 5, Study Session 15, Reading 51, LOS-g.

Interbank funding is unsecured therefore it is essentially based on confidence in the banking system. At the time of financial crises market is prone to dry up as banks withdraw from funding other banks.

105. Securitization typically:

A. increases liquidity risk in the financial system.
B. stimulates banks to use their own in-house loan portfolios.
C. provides alternative means of funding operations for businesses.

Correct Answer: C

Reference:
CFA Level I, Volume 5, Study Session 15, Reading 53.

C is correct. Securitization provides alternative means of funding operations for companies i.e. companies can originate loans and receivables that can be securitized in addition to using traditional funding through issuing bonds, preferred or common equity.

A is incorrect. Securitization allows for the creation of tradable securities with better liquidity, which reduces liquidity risks in the financial system.

B is incorrect. Securitization enables banks to increase loan originations at large economic scales instead of using only their in-house loan portfolios.

Questions 106 through 112 relate to Alternative Investments

106. An investor is seeking to include $0.5 million worth of infrastructure investments to his current $3 million traditional investment portfolio. The investor's goal is to select an investment that can distribute more free cash flows to their investors. Which of the following is the *most suitable* investment for the investor?

A. Direct investment in infrastructure
B. Master limited partnership (MLPs)
C. Shares of public companies that invest in infrastructure

Correct Answer: B

Reference:
CFA Level I, Volume 6, Study Session 18, Reading 58.

A variety of infrastructure investments are available such as direct investment in the underlying asset, indirect investment vehicles include shares of companies, ETFs, unlisted mutual funds, listed funds, publicly traded infrastructure securities or master limited partnerships (MLPs). MLPs.

Publicly traded infrastructure securities and MLPs are suitable for investors concerned about liquidity. MLPs generally distribute most free cash flows to their investors.

107. To generate returns from a merger arbitrage, a manager will *most likely*:

A. sell the stocks of target company and buy the stocks of the acquiring company.
B. buy sufficient equity with an attempt to have control on the company.
C. buy the stocks of target company and take a short position in the acquiring company.

Correct Answer: C

Reference:
CFA Level I, Volume 6, Study Session 18, Reading 58, LOS-d.

Under merger arbitrage a manager buys stocks of the target company when the merger announcement takes place and takes a short position in the acquiring company's stocks with an anticipation of overpayment by the acquirer for acquiring the target company and the subsequent increase in debt burden.

108. Relative to traditional investments, alternative investments are *most likely* to be characterized by:

A. high level of regulation.
B. narrow manager specialization.
C. liquidity of underlying investments.

Correct Answer: B

Reference:
CFA Level I, Volume 6, Study Session 18, Reading 58, LOS-a.

Relative to traditional investments the characteristics of alternative investments include:

- Low level of regulation
- Narrow manager specialization
- Illiquidity of underlying investments

109. A hedge fund that uses "Reporting NAV" *most likely* represents NAV:

A. adjusted for liquidity discounts based on quoted market price.
B. based on quoted market price and does not incorporate liquidity discounts.
C. adjusted for liquidity discounts based on the size of the position held relative to the total amount outstanding.

Correct Answer: B

Reference:
CFA Level I, Volume 6, Study Session 18, Reading 58, LOS-d.

For illiquid investments liquidity discounts or haircuts are used to reflect fair value. Hedge funds generally use two NAVs:

Trading NAV:
NAV adjusted for liquidity discounts based on the size of the position held relative to the total amount outstanding in the issue and its trading volume.

Reporting NAV:
It represents NAV based on quoted market price and does not incorporate liquidity discounts.

110. For valuing a large and mature private company, the multiple *most* commonly used under the market or comparable approach is:

A. Revenue multiple.
B. EBITDA multiple.
C. Net income multiple.

Correct Answer: B
Reference:
CFA Level I, Volume 6, Study Session 18, Reading 58, LOS-d.

For large and mature private companies, EBITDA multiple is most commonly used under market or comparable approach.

111. Returns to commodity investing are based on:

A. income stream.
B. change in prices.
C. both income stream and change in prices.

Correct Answer: B

Reference:
CFA Level I, Volume 6, Study Session 18, Reading 58, LOS-d.

Returns on commodity investments are based on changes in prices only as there are no other income streams such as interest income, dividends and rents in case of commodities.

112. Which of the following risk measure take into account in its measurement the low correlation of alternative investments with traditional investments?

1. Sharpe ratio
2. Sortino ratio
3. Value at risk
4. Safety-first risk

A. None.
B. 1 and 3 only.
C. 1, 3 and 4 only.

Correct Answer: A

Reference:
CFA Level I, Volume 6, Study Session 18, Reading 58, LOS-g.

Both Sharpe ratio and downside risk measures such as value at risk, Sortino ratio and Safety first risk fail to consider the low correlation of alternative investments with traditional investments.

Questions 113 through 120 relate to Portfolio Management

113. Three common characteristics of big data include:

   A. Velocity, variety, volume.
   B. Volume, velocity, validity.
   C. Variety, volume, verifiability

   Correct Answer: A

   Reference:
   CFA Level I, Volume 4, Study Session 12, Reading 43, LOS-b.

   B is correct. Big data refers to the datasets having the following characteristics: Volume, velocity and variety.

114. An analyst made the following statements regarding passive and active portfolios.

   Statement 1: Passive portfolios are based on the assumption of unbiased market prices.

   Statement 2: In an actively managed portfolio undervalued assets are over weighted relative to the market weight in the benchmark index.

   The analyst is *most likely* correct with respect to:

   A. Statement 1 only
   B. Statement 2 only.
   C. both Statement 1 and Statement 2.

   Correct Answer: C

   Reference:
   CFA Level I, Volume 4, Study Session 12, Reading 41, LOS-a.

   Analyst is correct with respect to both statements. Passive portfolios are based on the assumption of unbiased market prices and in an actively managed portfolio undervalued assets are over weighted relative to the market weight in the benchmark index.

115. Wesley is preparing the IPS of Aaban Masri. Masri prohibits Wesley from investing in the shares of:

- GreenX Inc. for certain periods in the year as he is director at GreenX and cannot trade shares before financial results are published.
- Casinos and bonds due to his compliance with Islamic law.

In which section of the IPS, will Wesley *most likely* document Masri's instructions regarding:

	GreenX Inc.?	**Casinos & bonds?**
A.	Unique circumstances	Unique circumstances
B.	Legal and regulatory factors	Unique circumstances
C.	Legal and regulatory factors	Legal and regulatory factors

Correct Answer: B

Reference:
CFA Level I, Volume 4, Study Session 12, Reading 43, LOS-e.

Option B is correct. Legal and regulatory factors generally refer to restrictions imposed by government, regulatory or oversight authorities that affect investment decision-making.

Unique needs are internal factors (at the discretion of investor) that restrict investment choices.

116. Which of the following *best* describes the outcome of the portfolio approach?

A. Portfolios generally reduce risk more than they increase returns.
B. Portfolio diversification provides better risk-reduction benefits during severe market turmoil.
C. The standard deviation of an equally weighted portfolio can be greater than the average of the standard deviation of the individual components.

Correct Answer: A

Reference:
CFA Level I, Volume 4, Study Session 12, Reading 39, LOS-a.

Option A is correct.

- Portfolios generally reduce risk more than they increase returns.
- Portfolio diversification **does not** provide better risk-reduction benefits during severe market turmoil.
- The standard deviation of an equally weighted portfolio **can be less than or equal to** the average of standard deviation of the individual portfolio components. Generally (S.D of equally weighted portfolio < S.D of individual components).

117. The sensitivity of the derivative price to a small change in the value of the underlying asset is called:

   A. delta.
   B. vega.
   C. gamma.

   Correct Answer: A

   Reference:
   CFA Level I, Volume 4, Study Session 12, Reading 40, LOS-g.

   The sensitivity of the derivative price to a small change in the value of the underlying asset is called delta.

118. Which of the following *least* describes the implications of separation theorem? Under separation theorem:

   A. optimal risky portfolio is same for all investors.
   B. investors cannot separate their risk aversion from choice of market portfolio.
   C. optimal portfolio selection is separated into investing and financing decisions and both are independent of each other.

   Correct Answer: B

   Reference:
   CFA Level I, Volume 4, Study Session 12, Reading 41, LOS-h.

   Under separation theorem:

   - optimal risky portfolio is same for all investors.
   - investors can separate their risk aversion from choice of market portfolio.
   - optimal portfolio selection is separated into investing and financing decisions and both are independent of each other.

119. Tom Dixon, CFA wrote the following statement in his article:

"An investor's expected income and time horizon helps in determining his willingness to take risk and his level of wealth relative to liabilities helps in determining his ability to take risk."

Dixon is *most likely* correct with respect to:

A. his statement.
B. factors determining the ability to take risk.
C. factors determining the willingness to take risk.

Correct Answer: B

Reference:
CFA Level I, Volume 4, Study Session 12, Reading 42, LOS-d.

Option B is correct. Dixon is correct with respect to ability to take risk only.

The ability to take risk is measured in terms of objective factors such as:

- time horizon
- expected income
- level of wealth relative to liabilities

However, willingness to take risk or risk attitude is a more subjective factor based on client's psychology and his personality type.

120. Which of the following is not one of the principles on which the strategic asset allocation is based?

A. Similar assets have similar exposures to certain sets of systematic factors.
B. Changes in portfolio value over the long term are primarily determined by portfolio's systematic risk.
C. When an asset class or subset of an asset class represents an efficient market, passive management is preferred.

Correct Answer: C

Reference:
CFA Level I, Volume 4, Study Session 12, Reading 43, LOS-f.

Option C is correct. Strategic asset allocation (SAA) is based on two principles:

i. Changes in portfolio value over the long term are primarily determined by portfolio's systematic risk.
ii. Similar assets have similar exposures to certain sets of systematic factors.