Konvexity CFA Level I MOCK EXAM
(Time: 180 Minutes)

This Mock Examination has 120 questions. You have 180 minutes to complete the exam. To best simulate the exam day experience, please allocate an average of 1.5 minutes per question.

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Questions 1 through 18 relate to Ethical and Professional Standards.

1. Markos Christodoulides is due to leave his current employment as an equity analyst in order to set up his own business. Whenever he talks to clients he signs off by telling them that he will shortly be leaving the firm, and that he will be unable to talk about his new venture after his resignation becomes effective. Has Markos violates the Code and Standards?

A. Yes, by mentioning the fact he was leaving  
B. No, as he has done nothing to induce the clients  
C. No, as an employee is permitted to talk freely with clients in the time between tendering of resignation and it becoming effective

2. Mahesh Devani CFA has marketed heavily a new analytical model that has been developed by his colleagues at Devani Risk Management Inc. When marketing the model he does not explicitly mention the fact that he did not develop the model but does demonstrate its use to best advantage. A client who uses a similar model provided by a rival company incurs large losses and blames the losses on alleged faults in the rival model. At the subsequent court case Mahesh gives expert witness testifying on his model’s strengths, without alluding specifically to the fact that he did not develop the model. Has he violated the standard against plagiarism?

A. Yes in respect of the client discussions but no in respect of the court case as he was not asked a direct question  
B. Yes in respect of the client discussions and yes in respect of the court case  
C. No in respect of the client discussions but yes in respect of the court case

3. Which of the following is least likely to be a part of vision statement of GIPS?

A. Presenting performance results that are readily comparable among investment management firms without regard to geographical location  
B. Facilitating a dialogue between investment managers and their prospective clients about the critical issues of how the investment management firm achieved performance results and determines future investment strategies  
C. Fostering the notion of industry “self-regulation” on a global basis

4. Firms from which countries can come into appliance with GIPS standards?

A. Any country  
B. All countries except banned by IMF  
C. All countries except banned by the Investment Performance Council
5. Are carve-out returns permitted to be included in single asset class composite returns given that the carve outs are managed separately with their own cash balances beginning the period of January 1, 2010?

A. Yes
B. No
C. There is nothing in GIPS about the carve-outs

6. According to GIPS standards, the composite return is

A. The market weighted average of the performance results of all the portfolios in the composite
B. The asset weighted average of the performance results of all the portfolios in the composite
C. The simple average of the performance results of all the portfolios in the composite

7. Which of the following statements is least accurate?

A. The provisions of GIPS standards only apply to the real estate investments that is producing revenue
B. The provisions of GIPS standards apply to the real estate investments with leverage
C. The provisions of GIPS standards apply to the real estate investments with no leverage

8. Which of the following is least likely to be a requirement of firm’s fundamental responsibility?

A. Firms must list “discontinued” composites on the firm’s list of composited for at least 5 years after discontinuation
B. As long as a prospective client has received compliant presentation within the previous 24 months, the firm has met the requirement to provide a complaint presentation to all prospective clients
C. Firms must provide a composite description to any prospective client on request

9. Christina Vardanyan has recently become a candidate for the CFA level I examination. She is aware that many others in her firm have also taken the examination. Which of the following best describes her duty with respect to informing her employer of her obligations under the Code and Standards?

A. She should tell her immediate supervisor of her obligation to conform to the Code and Standards
B. She has no obligation as other colleagues would have informed the employer previously
C. She should inform her immediate supervisor of her obligation to conform to the Code and Standards in writing
10. Irfan Rafique, an investment adviser currently runs an independent practice with a steady stream of work provided by several wealthy clients. Irfan is considering an offer from a friend to go in house, the friend is aware of his existing business but thinks that Irfan would make a valuable addition to his investment team. If Irfan is to maintain his own business as well as being employed then which of the following best describes his course of action?

A. Obtain the written consent of his new employer to retain his old business and disclose in writing to each of his clients his new employment
B. Obtain the written consent of his clients to retain his old business and disclose in writing to his new employer
C. Obtain the written consent of his clients to retain his old business and disclose verbally to his new employer

11. Anupama Sharma’s company imposes trading restriction on employees forbidding them from entering into any equity purchases of US listed securities. Anupama believes that this is an unfair restriction on her right to trade and decides to buy a single share in Apple, not for personal profit but to make an ethical stand. Has Anupama violated her duty towards her employer?

A. No, because the purchase was justified on ethical grounds
B. Yes, because she could still make a profit
C. Yes, because she has no right to unilaterally disapply a trading restriction just because she feels it unjust

12. Wojciech Zdunkiewicz, an equity analyst conducts extensive research into Satyam Computers and is convinced that the stock is a strong buy. He is due to release the research the next day, certain of the accuracy of his advice. Whilst enjoying a celebratory dinner at his favorite restaurant he notices a rival analyst sitting at a nearby table. He drops his fork and crawls around on the floor so that he can get closer to his table to hear what is being said. The rival analyst is boasting to his friend that only he has called Satyam Computers correctly, that the company is in real trouble and will most likely be in liquidation before the end of the year. Wojciech runs back to the office and changes his note to a sell. Has he breached the code of standards?

a. Yes, because the information is non-public and price sensitive and his actions amount to insider trading
b. Yes, because he has misappropriated non-public information
c. Yes, because he does not have a sound basis for his new opinion
13. Vivek Raj, CFA, is a corporate financier and a non-executive director of Nerds Inc. His family receives free groceries from Nerds Inc as part of his compensation package. Vivek discloses his non-executive salary to his employer but not the groceries as he considers them a private matter. Has he breached his obligation to his employer?

A. No, as the groceries have no cash equivalent
B. Yes, as he must not receive any outside compensation
C. Yes, as he should disclose all compensation from outside sources

14. Munasira Khan has enrolled for the CFA level II exam next sitting. She achieved her level I pass many years ago (in 2005). Which of the following is an unacceptable description of her status for inclusion in investment literature?

A. CFA level I pass
B. CFA level II expected next June
C. CFA level I pass (2005)

15. Diego Rocha is a stock broker in Brazil, a country with no securities laws. His squash partner tells him and a rival fund manager of forthcoming takeover bid he is launching. Diego knows that his rival will advise his clients to trade on this information, should he?

A. Yes, because to fail to do so will be to fail to act in your clients’ best interests
B. No, because this information related to a tender offer and he must apply the higher of the local rules or the Code and Standards
C. No, because this information related to a tender offer and such a trade would be illegal in Brazil

16. Neeraj Ahuja is a sell side research analyst. He produces a report recommending a stock based on work done by his colleague, Mubashshir Ali Khan and by a model developed by Professor Naveed Khan at the University of Pittsburg. Neeraj has tweaked the model and believe it would not have produced the results it did but for the tweaks. His report goes out solely in his name, has he violated the standard against plagiarism?

A. No, because the model was tweaked
B. Yes, in respect of Professor Naveed Khan’s work but no in respect of Mubashshir Ali Khan
C. Yes, in respect of Professor Naveed Khan’s work and yes in respect of Mubashshir Ali Khan
17. Amit Singh, CFA, purchased at varying prices during the trading session a large block of stock on behalf of specific accounts he managed. The stock realized a significant gain in value before the close of the trading day, so Amit reviewed his purchase prices to determine what prices should be assigned to each specific account. According to the Standards of Practice Handbook, Amit’s most appropriate action is to allocate the execution prices:

A. by giving longer-term clients more favorable prices
B. to all clients within the block trade at the same execution price
C. on a weighted basis according to the size of the clients’ accounts

18. Neeraj Kohli, CFA, deputy treasurer for May College, manages the Student Scholarship Trust. Neeraj issued a Request for Proposal (RFP) for domestic equity managers. Pamela Peters, CFA, a good friend of Neeraj, introduces him to representatives from Capital Investments, who submitted a proposal. Neeraj selected Capital as a manager based on the firm’s excellent performance record. Shortly after the selection, Peters, who had outstanding performance as an equity manager with another firm, accepted a lucrative job with Capital. Which of the CFA Charter holders violated CFA Institute Standards of Professional Conduct?

A. Both violated Standards
B. Peters violated Standards
C. Neither violated Standards

Questions 19 through 32 relate to Quantitative Methods

19. Which of the following statements is least accurate?

A. the deciding points of double top and double bottom act as resistance and support respectively
B. the neckline of an inverse head-and-shoulders acts as support while its formation
C. the formation of a triangle takes place when graph makes lower highs and higher lows

20. The annual earnings per share (EPS) for a population of firms are normally distributed with a mean of $12 and a standard deviation of $5. What is the z-value for EPS of $8 if the population has 25 companies?

A. -0.8
B. -4.0
C. 4.0
21. An analyst gathered the following information about three portfolios:

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Portfolio A</th>
<th>Portfolio B</th>
<th>Portfolio C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected return</td>
<td>15%</td>
<td>18%</td>
<td>24%</td>
</tr>
<tr>
<td>Variance of returns</td>
<td>0.0144</td>
<td>0.04</td>
<td>0.09</td>
</tr>
</tbody>
</table>

Which portfolio has the largest SFRatio? Assume the threshold return to be 10% and the risk free rate to be 6%.

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

22. The harmonic mean of the returns of a stock for the last 5 years is 12.5%. What is the least likely value of the geometric mean of the same returns?

A. 9.5%
B. 12.5%
C. 14.5%

23. The probability distribution of returns from a stock is given in the following table:

<table>
<thead>
<tr>
<th>Probability</th>
<th>Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>-10%</td>
</tr>
<tr>
<td>25%</td>
<td>-4%</td>
</tr>
<tr>
<td>20%</td>
<td>6%</td>
</tr>
<tr>
<td>40%</td>
<td>Y %</td>
</tr>
</tbody>
</table>

What is the value of ‘Y’ if the expected return from the stock is 8%?

A. 10.75
B. 16.00
C. 23.25

24. Sarika will get $10,000 per annum after retirement for 20 years at the beginning of each year. What is the present value of her retirement portfolio at the beginning of her retirement? Assume interest rate of 10% to be compounded annually.

A. $103,014.12
B. $93,649.20
C. $85,135.63
25. The mean, median, and mode of a distribution is 3.5, 3.8 and 4.0. The distribution is most likely to be:

A. Symmetrical  
B. Positive skewed  
C. Negative skewed

26. The bank discount yield for an instrument with 180 days to maturity is 4.5%. Calculate the holding period yield.

A. 2.25%  
B. 2.27%  
C. 2.30%

27. Fermion Majorana bought a house with taking loan of $80,000. He can afford $500 per month for his monthly mortgage payment for next 30 years. Calculate the excess amount per month he would need to finance his outstanding debt. Discount rate is 9% per annum?

A. $143.70  
B. $500.00  
C. $643.70

28. Which of the following statements is least accurate?

A. Higher is the standard of deviation, lower is the coefficient of variation  
B. The Sharpe ratio decreases with increase in risk-free rate of return  
C. Leptokurtic distribution is more peaked than a normal distribution

29. The confidence interval for a population mean is from 64 to 76. What is the reliability factor if the sample standard deviation is 12? The sample size is 25.

A. 0.5  
B. 2.5  
C. 5.0

30. Purvi Joshi is an equity analyst. She wants to compare companies according to their P/B ratios at the end of each year for last 10 years. But she finds out that book value is not getting updated at the end of year and generally gets updates 30 to 60 days after the beginning of the next year. Her results are most likely to suffer by:

A. sample selection bias  
B. time-period bias  
C. look-ahead bias
31. Vaibhav Aggarwal, a CFA level II candidate, performs a hypothesis test and finds out that the probability of correctly rejecting the null hypothesis when it is false is 0.90. What is the probability of Type II error if the test is a two-tailed test?

A. 0.90  
B. 0.10  
C. 0.05  

32. Nick Crompton is a portfolio manager and wants to invest in telecommunication and hospitality industry. The returns from both the sectors are almost the same. He wants to check whether the variances of two sectors are also the same or not and depending on that wants to make an investment decision. Which hypothesis test would he most likely to apply for this?

A. t-test  
B. chi-square test  
C. F-test  

Questions 33 through 44 relate to Economics

33. Charcoal has a demand function as \(Q_D = 12 - 4P_C\) and a supply function as \(Q_S = 5P_C - 6\), where \(Q_D\) = quantities demanded of charcoal, \(Q_S\) = quantities supplied of charcoal and \(P_C\) = price per unit of charcoal. What is the total surplus at the equilibrium price?

A. 1.8  
B. 2.0  
C. 3.6  

34. Which of the following is least likely to cause a shift in the long-run aggregate supply curve?

A. Input price  
B. Stock of physical capital  
C. Change in technology  

35. Vineet Saini studied the economic history of last century and concluded that the business cycles are caused by the government intervention in the economy. He stated that the artificial decrease in interest rate by the central bank cause the boom and which is followed by the bust. Which economic school of thought he is most likely to agree?

A. New Keynesian School  
B. New Classical School  
C. Austrian School
36. The marginal propensity to consume is 60% and the tax rate for a country is 40%. The government spending of $1,000 has a potential to increase aggregate demand by

A. $1,240.00  
B. $1,315.80  
C. $1,562.50

37. The USD/INR spot exchange rate is 52.65 and the 1-year forward rate is quoted at 7.35 points. What is the 1-year forward USD/INR exchange rate?

A. 60.000000  
B. 52.723500  
C. 52.650735

38. Which of the following is least likely to increase a current account deficit?

A. lower levels of private savings  
B. lower rates of domestic investments  
C. larger government deficits

39. Rahul Jindal is analyzing auto industry for smaller cars. He notices that if the price of cars increases above $8,250 then the demand curve is more elastic and below that price the demand curve is less elastic. The auto industry for smaller cars is most likely following

A. Stackelberg dominant firm model  
B. Cournot duopoly model  
C. Kinked demand curve model

40. Which of the following statements is least accurate?

A. the minimum point on the ATC curve represents the profit-maximizing point  
B. the MC curve intersects AVC and ATC curves at their minimum points  
C. the AVC curve is U-shaped and the AFC curves slopes downward

41. Kathy McKibben is studying an industry. She finds out that it has many firms. The barriers to entry are low and the competition is mainly on price, marketing and features. The industry is most likely to have what kind of market structure?

A. Perfect competition  
B. Monopolistic competition  
C. Oligopoly
42. For a Giffen good, when price falls
   A. the positive substitution effect outweighs negative income effect
   B. the negative substitution effect outweighs positive income effect
   C. the negative income effect outweighs the positive substitution effect

43. Which of the following statements is least accurate about tax incidence?
   A. The actual tax incidence is independent of whether the government imposes the tax on consumers or suppliers
   B. Consumers will bear a higher tax burden if demand curve is less elastic than supply curve
   C. Suppliers will bear a higher tax burden if supply curve is more elastic than demand curve

44. Which of the following statements is most accurate about the indifference curves?
   A. Indifference curves for two goods slope downward
   B. The inverse of slope of an indifference curve at any point s referred to as the marginal rate of substitution
   C. Inverse curves are concave towards the origin

Questions 45 through 68 relate to Financial Statement Analysis

45. For 2011, Konvexity Institute had net income of $25,000. At 1 January 2011, there were 12,500 shares outstanding. On 1 April 2001, the company issued 2,000 new shares for $35 per share. The company paid $5,000 in dividends to common shareholders. What is Konvexity Institute’s basic earnings per share for 2011?
   A. $1.429
   B. $1.724
   C. $1.786

46. Catallaxy Education Limited (CEL) had 500,000 average shares outstanding during all of 2011. During 2011, CEL also had 5,000 options outstanding with exercise prices of $10 each. The average stock price of CEL during 2011 was $20. For purposes of computing diluted earnings per share, how many shares would be used in the denominator?
   A. 500,000
   B. 502,500
   C. 505,000
47. Which of the following statements is least accurate?

   A. For a company having simple capital structure, basic EPS is equal to diluted EPS
   B. Diluted EPS is calculated using the treasury stock method for convertible securities and options
   C. While calculating EPS, we need to subtract the preferred dividends from the earnings

48. Which of the following inventory measurement methods is not permitted under IFRS?

   A. Weighted average
   B. First in, First out (FIFO)
   C. Last in, First out (LIFO)

49. Which of the following ratios gives the most conservative estimate of the company’s liquidity position?

   A. Cash ratio
   B. Current ratio
   C. Acid-test ratio

50. Deferred tax is a part of

   A. Current liabilities
   B. Non-current liabilities
   C. Equity

51. For which kind of marketable securities, the unrealized gains (losses) are included into the income statement?

   A. Trading securities
   B. Available-for-sale securities
   C. Held to maturity securities

52. Which of the following statements is most accurate about the interest expense?

   A. It can be classified as either operating or financing cash flow under U.S. GAAP
   B. It can only be classified as the financing cash flow under U.S. GAAP
   C. It can be classified as either operating or financing cash flow under IFRS
53. Konvexity Institute, a financial training company, reported cost of goods sold for the year as $300,000. Total assets and total inventory increased by $150,000 and $50,000 respectively. Total liabilities increased by $100,000 and accounts payable remained unchanged. How much cash did the company pay to its suppliers during the year?

A. $350,000  
B. $300,000  
C. $250,000

54. The dividend paid is least likely to fall under which kind of cash flow under IFRS?

A. Operating cash flow  
B. Investing cash flow  
C. Financing cash flow

55. What is the impact of dividends paid on FCFF and FCFE?

A. It decreases both FCFF and FCFE  
B. No impact on FCFF and decrease in FCFE  
C. No impact on FCFF and FCFE

56. CEL follows IFRS. It recently purchased inventory for $75 million and spend $15 for storage prior to selling the goods. The amount it charged to inventory expense (in millions) was closest to

A. $60  
B. $75  
C. $90

57. In the environment of declining prices, the reported profit will tend to be highest in what kind of inventory measurement method?

A. LIFO method  
B. FIFO method  
C. Weighted average cost method
58. An analyst calculates the following ratios for a firm:

<table>
<thead>
<tr>
<th>Total assets/Sales</th>
<th>Net Profit Margin (%)</th>
<th>Equity/ Total Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.35</td>
<td>6</td>
<td>0.60</td>
</tr>
</tbody>
</table>

The return on equity (in %) for this firm is closest to:
A. 15.38%
B. 17.14%
C. 28.57%

59. An asset’s useful life is 10 years. What is the depreciation in the 2nd year according to double-declining balance method assuming the cost of the asset to be $50,000 and the straight line depreciation rate to be 10%? The salvage value of the asset is $5,000.

A. $9,000
B. $8,000
C. $7,200

60. Which of the following ratios is most likely to be higher for a finance lease when compared with an operating lease?
A. Asset turnover ratio
B. Return on equity
C. Debt to equity

61. QnA Company wants to capitalize interest costs it incurs during and related to construction of its new storage and shipping facility. It can do it under:
A. IFRS
B. GAAP
C. Both of the above

62. Which of the following statements is least accurate?
A. Deferred tax liability should be treated as equity when they are not expected to reverse
B. When both the timing and amount of tax payments is uncertain, analyst should treat deferred tax liabilities as liabilities
C. Analysts should treat deferred tax liability as liability if it is expected to reverse
63. Rising Star Ltd. has $250 million in shareholders’ equity and $350 million in long-term debt. 60% of the long-term debt is convertible bonds. What would be its long-term debt-to-equity ratio if the bonds were converted? Assume the tax rate to be 30%.

A. 0.30  
B. 0.76  
C. 1.40  

64. The leased asset appears on the balance sheet of a lessor and continues to be depreciated when the lease is classified as

A. an operating lease  
B. a sales-type lease  
C. a direct financing lease  

65. Which of the following statement is most likely to be correct about standard auditor’s opinion?

A. The financial statements are prepared by management and the auditor has performed a dependent review  
B. Generally accepted auditing standards are followed and provide reasonable assurance that financial statements contain no material errors  
C. The statements are prepared in accordance with GARP and the principles chosen and estimates made are reasonable  

66. Which of the following is least likely to be a characteristic of a coherent financial reporting framework?

A. Flexibility  
B. Transparency  
C. Comprehensiveness  

67. The information about discontinued operations are most likely to be found in

A. Supplementary schedules  
B. Financial statement notes  
C. Management’s Discussion and Analysis  

68. The salaries are received at the end of month. The salaries are reported on the employers’ balance sheet as

A. Accrued revenue  
B. Accrued expense  
C. Unearned revenue
Questions 69 through 78 relate to Corporate Finance

69. Two projects have the following annual cash flows:

<table>
<thead>
<tr>
<th>Project</th>
<th>Year 0:</th>
<th>Year 1:</th>
<th>Year 2:</th>
<th>Year 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project A</td>
<td>-$10,000</td>
<td>$3,500</td>
<td>$6,500</td>
<td>$7,000</td>
</tr>
<tr>
<td>Project B</td>
<td>-$20,000</td>
<td>$8,000</td>
<td>$12,000</td>
<td>$13,500</td>
</tr>
</tbody>
</table>

What is the cross-over rate for the projects?

A. 23.69%
B. 25.30%
C. 27.82%

70. Which of the following methods for making investment decision criteria is least likely to take into account the time value of money?

A. Profitability index
B. Payback period
C. Internal rate of return

71. Shariyank Bv wants to invest in a project. The initial cash outflow for the project is $4,500. The project is going to give a constant annual cash flow of $500 till perpetuity. What is the NPV of the project at 8% per annum?

A. $1,750
B. $6,250
C. $10,750

72. What is the most likely impact of increase in taxes on the capital structure of a firm?

A. Increase in taxes will most likely lead to more usage of debt
B. No impact
C. Increase in taxes will most likely lead to less usage of debt

73. Airflow is a new company with no historical record in wind power sector. You want to estimate the equity beta for the company. A company in a similar business has equity beta of 1.2 with 40% debt in capital structure. What will be the equity beta for Airflow if its D/E ratio is 0.667? Assume that the tax rate for the both companies is 30%.

A. 1.047
B. 1.200
C. 1.375
74. Hassan SadoZye wants to estimate the cost of equity of a company which is investing in Pakistan. He has researched yields in Pakistan and observed that the Pakistan government’s 10-year bond is 8.5 percent. A similar maturity U.S. Treasury bond has a yield of 3.0 percent. The annualized standard deviation of the U.S. stock index S&P during the most recent year is 25% and the annualized standard deviation of the Pakistan stock index Karachi Stock Exchange is 35%. The annualized standard deviation of the Pakistan dollar-denominated 1-year government bond over the recent period was 22%. What is the estimated country equity premium for Pakistan based on Hassan SadoZye’s research?

A. 6.25%
B. 7.70%
C. 8.75%

75. Viva Tech. wants to buy back its share from the market. It is currently trading at $3.5 and its book value per share is $3.0. The effect of buyback on the new book value per share will be

A. Negative
B. No effect
C. Positive

76. The following information is available for a firm:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$750,000</td>
</tr>
<tr>
<td>Variable Cost</td>
<td>350,000</td>
</tr>
<tr>
<td>Fixed Cost</td>
<td>200,000</td>
</tr>
<tr>
<td>Operating Income</td>
<td>200,000</td>
</tr>
<tr>
<td>Interest</td>
<td>50,000</td>
</tr>
<tr>
<td>Net Income</td>
<td>$150,000</td>
</tr>
</tbody>
</table>

The firm’s degree of total leverage (DTL) is closest to:

A. 1.33
B. 2.00
C. 2.67

77. Which of the following is least likely to cause a pull on liquidity?

A. Obsolete inventory
B. Making payments early
C. Reduced credit limits
78. The number of days of inventory increased by 10 and the number of days of receivables decreased by 12. What will be the net impact of this on the difference between cash conversion cycle and operating cycle?

A. Increase by 2  
B. No impact  
C. Decrease by 2

**Questions 79 through 90 relate to Equity Investments**

79. You want a long position on a stock. You are least likely to take which of the following positions?

A. Short put  
B. Long on futures  
C. Short call

80. Amna Ahmed is a commodity trade. She trades oil futures. While trading oil futures one day, she notices that on the ask side only 20 lots are seen and she is able to buy much higher number of lots than 20 and those 20 lots are still displayed on the ask side. What kind of orders she is witnessing in the market?

A. Hidden orders  
B. All-or-nothing orders  
C. Iceberg orders

81. Which of the following statements is most accurate about the rebalancing and reconstitution?

A. Rebalancing will always lead to reconstitution  
B. Rebalancing and reconstitution have no impact on each other  
C. Reconstitution will always lead to rebalancing
82. The data for four stocks in a portfolio are as follows:

<table>
<thead>
<tr>
<th>Stock</th>
<th>Shares bought</th>
<th>Beginning of Period Price ($)</th>
<th>End of Period Price ($)</th>
<th>Dividends Per Share ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>200</td>
<td>40</td>
<td>45</td>
<td>1.00</td>
</tr>
<tr>
<td>B</td>
<td>500</td>
<td>68</td>
<td>60</td>
<td>0.50</td>
</tr>
<tr>
<td>C</td>
<td>300</td>
<td>60</td>
<td>70</td>
<td>1.50</td>
</tr>
<tr>
<td>D</td>
<td>100</td>
<td>20</td>
<td>24</td>
<td>0.80</td>
</tr>
</tbody>
</table>

What is the difference between the percentage total return and percentage price return?

A. 1.58%
B. 2.24%
C. 3.16%

83. Maryland Research is a fund management company which is able to generate excess return mainly due to the private information they have about the securities. They are least likely to be operating in

A. Weak-form efficient market
B. Semi-strong form efficient market
C. Strong form efficient market

84. An investor missed many opportunities in the market because he was slow to react to the changes in the market. Which of the following biases he is most likely to suffer:

A. Gambler’s fallacy
B. Disposition effect
C. Conservatism

85. You have 30% ownership in a company. The company is selecting its board of directors by cumulative voting. The company is going to select 16 directors. What will be the minimum number of the directors of your choice?

A. 4
B. 5
C. 11

86. Which of the following kind of ADRs will most likely to have high listing fees?

A. Level I
B. Level III
C. Rule 144A
87. Which of the following is least likely to be a cyclical company?

A. FMCG company  
B. Automobile company  
C. Information technology company

88. Which stage of industry life cycle is followed by slowing growth and intense competition?

A. Growth stage  
B. Mature stage  
C. Shakeout stage

89. Which of the following is least likely an assumption of the Gordon model?

A. the dividend growth rate is perpetual and never changes  
B. the required rate of return is constant over time  
C. the dividend growth rate may be less than the required rate of return

90. A stock has just paid a dividend of $1.5 and it is expected to increase at a constant growth rate of 6%. The required rate of return is 10%. The stock is trading at $37.50. According to Gordon mode, the stock is most likely to be

A. overvalued  
B. fairly valued  
C. undervalued

Questions 91 through 96 relate to Derivative Investments.

91. Kamran Arshad Satti took a long position in a 3X7 FRA at 4.6%. At the end of contract expiry, the 90-days and 120-days rates are 4.5% and 4.8%. What is the payoff of this FRA at the end of contract? Assume the notional principal to be $100,000.

A. -$24.70  
B. $65.62  
C. $65.66

92. Which of the following type of traders is least likely to square off position within a trading day?

A. Scalper  
B. Position trader  
C. Day trader
93. Which of the following options is/are least likely to be out-of-the-money option?

A. Call option with strike price $25 and spot price $30
B. Put option with strike price $30 and spot price $35
C. Both of the above

94. Katie Reisch has applied for a student floating rate loan for her educational expenses. She also bought an interest rate collar on the loan. She is most likely to go

A. long on interest rate cap and short on interest rate floor
B. short on interest rate cap and long on interest rate floor
C. long on interest rate cap and long on interest rate floor

95. Laurent Calkoen entered into an equity swap where he will have to pay the fixed rate of a bond set at 7% per annum and will receive the returns on an equity index. Suppose the equity index at the beginning and at the end of first year is at 1,250 and 1,200. What is the payoff from this swap position if the notional principal is $1 million?

A. Loss of $111,667
B. Loss of $110,000
C. Loss of $30,000

96. The payoff graph of a long position in call option is similar to the payoff graph of

A. Covered call strategy
B. Protective put strategy
C. Short put

Questions 97 through 108 relate to Fixed Income Investments.

97. The following table gives the coupon rate of a bond.

<table>
<thead>
<tr>
<th>Year</th>
<th>Reference rate</th>
<th>Coupon rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.5%</td>
<td>5.0%</td>
</tr>
<tr>
<td>2</td>
<td>4.0%</td>
<td>5.5%</td>
</tr>
<tr>
<td>3</td>
<td>4.5%</td>
<td>6.0%</td>
</tr>
<tr>
<td>4</td>
<td>4.0%</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

The bond is most likely to be a

A. Step-up note
B. Floating rate bond
C. Inverse floater
98. Which embedded option is least likely to be beneficial to a bondholder?

A. The right to put the issue
B. An accelerated sinking fund provision
C. Conversion privilege

99. A bond is trading at $102.50. It pays 8% coupon annually. The par value of bond is $100. Which of the following statements is least likely to be true for the bond?

A. the bond is yielding 6.5%
B. the bond’s price next year will be $103.2 if all other things like yield and other risks, remain the same
C. the bond has both reinvestment risk and interest rate risk

100. Which of the following bonds is most likely to have least reinvestment risk?

A. Inverse floater
B. Deferred coupon bond
C. Normal coupon bond

101. A bond has been downgraded from AA rating to A+ rating. What will happen to the short position in this bond?

A. Gain
B. No impact
C. Loss

102. Which of the following statements is most accurate about the volatility risk?

A. Volatility risk in callable bonds and putable bonds occur due to decrease and increase in expected yield volatility respectively
B. Volatility risk in callable bonds and putable bonds occur due to an increase and decrease in expected yield volatility respectively
C. Volatility risk in both callable bonds and putable bonds occur due to an increase in expected yield volatility

103. Girija Ray is researching the corporate bond defaults. He is ranking them according to a criteria which defines the default rate as the par value of all bonds that defaulted in a given calendar year, divided by the total par value of all bonds outstanding during the year. He is most likely ranking the bonds according to

A. Issuer default rate
B. Dollar default rate
C. Book value default rate
104. Consider the coupons paid by a structured note in last 5 years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Coupon paid</th>
<th>Reference rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>2</td>
<td>5.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>6.2%</td>
</tr>
<tr>
<td>4</td>
<td>5.2%</td>
<td>5.2%</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

The structured note is most likely to be a

A. Deleveraged floater
B. Dual-indexed floater
C. Range note

105. An analyst has gathered the following information about the yields of securities of various maturities for a particular country:

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.3%</td>
</tr>
<tr>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>5</td>
<td>2.5%</td>
</tr>
<tr>
<td>7</td>
<td>3.2%</td>
</tr>
<tr>
<td>10</td>
<td>3.0%</td>
</tr>
<tr>
<td>13</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

Which theory of the term structure of interest rates explains the above scenario in the best possible way?

A. The pure expectation theory
B. The liquidity preference theory
C. The market segmentation theory

106. A floater with a quoted margin of 70 basis points is trading at 99.20 and it is going to mature in 5 years. What is the spread for life of the floater if its par value is 100?

A. 53.92 basis points
B. 72.36 basis points
C. 86.69 basis points
107. The Macaulay duration for a quarterly paying coupon bond is 6.5. What is its modified duration if the bond is yielding 5.6%?

A. 6.16  
B. 6.41  
C. 6.59

108. Which of the following model is used to value mortgage-backed securities?

A. Binomial model  
B. Monte Carlo simulation model  
C. Both of the above

Questions 109 through 114 relate to Alternative Investments.

109. Which of the following statements is least accurate about ETFs?

A. They can be bought on margin  
B. Their price are updated on regular intervals in a normal trading day  
C. Dividends are reinvested immediately for open-end ETFs

110. Which of the following risks is least likely to bother ETFs?

A. Market risk  
B. Currency risk  
C. Credit risk

111. A real estate investment has the following characteristics:

<table>
<thead>
<tr>
<th>Annual rental income</th>
<th>$1,900,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual operating expenses</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>Available mortgage rate</td>
<td>6.5%</td>
</tr>
<tr>
<td>Financing percentage</td>
<td>80%</td>
</tr>
<tr>
<td>Capitalization Rate</td>
<td>12.5%</td>
</tr>
<tr>
<td>Estimated holding period</td>
<td>5 years</td>
</tr>
<tr>
<td>Investor’s tax rate</td>
<td>25%</td>
</tr>
</tbody>
</table>

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

A. $2,400,000  
B. $3,200,000  
C. $4,266,667
112. Venture capital investments used to provide capital for preparation for the step of going public are most likely to be considered a form of:

A. Seed-stage financing  
B. Mezzanine financing  
C. Third-stage financing

113. The failure probability of a project is given below:

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failure probability</td>
<td>0.3</td>
<td>0.2</td>
<td>0.15</td>
<td>0.10</td>
<td>0.10</td>
</tr>
</tbody>
</table>

What is the probability that the project survives till the end of 4 years?

A. 25.00%  
B. 38.56%  
C. 42.84%

114. The roll yield in positive in

A. Contango  
B. Backwardation  
C. None of the above

Questions 115 through 120 relate to Portfolio Management.

115. Ankeet Teli is a hedge fund manager. He goes long on equities that are expected to increase in value and sell short equities that are expected to decrease in value. He is most likely following which of the following strategies:

A. Equity market neutral  
B. Long/short  
C. Event driven

116. Which of the following kinds of clients is least likely to have a low risk tolerance and high liquidity needs?

A. Defined benefit pension plans  
B. Insurance companies  
C. Banks
117. Which of the following statements is least accurate about the indifference curves?

A. The indifference curve for risk-averse investors runs from the southwest to the northeast
B. The most risk-averse investor has an indifference curve with the greatest slope
C. The indifference curves of risk-neutral investors are vertical because the utility is invariant with risk

118. Phan Duy has invested in an instrument which provides an expected return of 15% and a standard deviation of 25%. What is the utility of this investment for him if his risk aversion coefficient is 4?

A. 0.025
B. 0.050
C. 0.100

119. Which of the following is least likely to be accurate according to two-fund separation theorem?

A. The investment decision is taken without considering the investor’s preferences
B. The individual investor’s risk preference determines the amount of financing
C. Selection of optimal portfolio is a part of the financing decision

120. Which of the following is least likely to be an example of systematic risk?

A. Airplane crash
B. Political uncertainty
C. Interest rates