2011 Level 1 Sample Exam Volume 1 Answer

1. Correct answer: A

2011 Modular Level I , Vol. 1, p.15   Study session 1-1-c
"Guidance for Standards I -VII," CFA Institute
2011 Modular Level I, Vol. 1, pp. 46-47
Study session 1-2-a
Explain the ethical responsibilities required by the Code and Standards, including the multiple sub-sections of each Standard.
Demonstrate a thorough knowledge of the CFA Institute Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to situations involving issues of professional intergrity.

By not adhering to the non-compete clause that he agreed to abide by when signing the employment contract, Hasina shows a lack of professional integrity toward his employer and reflects poorly on the good reputation of members, which is required by the Code of Ethics and Standard I(D), Professionalism (Misconduct).

2. correct answer: C

2011 Modular Level I, Vol. 1, pp. 172-173   Study Session 1-3-a
Explain why the GIPS standards were created, what parties the GIPS standards apply to, and who is served by the standards.

Compliance with the GIPS standards does not eliminate the need for in-depth due diligence on the part of the investor.

3. correct answer: B

2011 Modular Level I, Vol. 1, p. 173   Study session 1-3-c
Explain the requirements for verification.

The firms that claim compliance with the GIPS standards are responsible for their claim of compliance and for maintaining that compliance.

4. Correct answer: C

Both Musa and Kassim violated the Standards of Professional Conduct. Musa violated Standard IV(C), Duties to Employers (Responsibilities of Supervisors), by not ensuring that policies were in place to prevent violations of the Code and Standards (in this case Standard VI(B)), Conflicts of Interest (Priority of Transactions) by someone subject to her supervision. As Head of Compliance, Musa supervised Kassim. Kassim violated Srandard

VI(B), Conflicts of Interest (Priority of Transactions), in that he did not give sufficient priority to Dunfied's clients before trading on his recommendation.

5. correct answer: B
2011 Modular Level I, Vol. 1, pp. 47,83   Study Session 1-2-c
Recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct.

Analysts are in the business of formulating opinions and insights that are not obvious to the general investing public about the attractiveness of particular securities. In particular, under the mosaic theory, and analyst is free to trade based upon information developed in the course of her own research even if this information would have been material inside information had it been communicated directly to the analyst by the company. In addition, members and candidates should make reasonable efforts to achieve public dissemination of information that is material and nonpublic. This effort usually entails encouraging the issuer company to make the information public.

6. Correct answer: A
2011 Modular Level I, Vol. 1, pp. 47, 57-58, 105   Study Session 1-2-b
Distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

It appears that a reasonable and diligent effort has been made to determine that the investment action is sound and suitable for his clients. Selling stock short is a management strategy and does not necessarily violate any aspect of the CFA Institute Code and Standards.

7. correct answer: C
2011 Modular Level I, Vol. 1, pp. 71,108,116   Study Session 1-2-c
Recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct.

The analyst can express her disagreement with the team by documenting her difference of opinion, but it is inappropriate for the analyst to make selective disclosure. In addition, the analyst has not separated fact from opinion. Members and candidates must make every effort to treat all individual and institutional clients in a fair and impartial manner,

8. Correct answer: A
2011 Modular Level I, Vol. 1. pp. 76,114,121   Study Session 1-2-b
Distinguish between conduct that conforms to the Code and Standards and conduct that violates the Code and Standards.

There is no indication the investment is unsuitable for investors.

9. Correct answer: B

2011 Modular Level I, Vol. 1, pp. 69-70   Study Session 1-2-c

Recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct.

Even though the analyst is not treating all clients in an equitable manner, there is no indication she has breached any conflicts of interest.

10. Correct answer: C

2011 Modular Level I, Vol. 1, pp. 266-267   Study Session 2-5-c

Calculate and interpret the effective annual rate, given the stated annual interest rate and the frequency of compounding.

The effective annual rate (EAR) is $(1+\text{periodic interest rate})^n-1$. In this case, the periodic interest rate is $0.02/12=0.01667$ and the EAR is $(1.01667)^{12}-1=0.21939=22\%$.

11. Correct answer: B

2011 Modular Level I, Vol. 1, p. 399   Study Session 2-7-j

Define and interpret skewness, explain the meaning of a positively or negatively skewed return distribution, and describe the relative locations of the mean, median, and mode for a nonsymmetrical distribution.

For the positively skewed unimodal distribution, the mode is less than the median, which is less than the mean.

12. Correct answer: B

2011 Modular Level I, Vol.4, pp. 11-13   Study Sessions 2-6-a, 11-44-d

Calculate and interpret the net present value (NPV) and the internal rate of return (IRR) of an investment.

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

Enter the given cash flows into a financial calculator and solve for IRR. The IRR is 5.46867%. Alternatively, find the NPV of the given cash flows using the three possible answers. The NPV using 4.41% as the discount rates is €352.35; the NPV using 5.47% is €-0.43; the NPV using 19.33% is €-3,499.58. The NPV using 5.47% is closest to zero, and 5.5% is ,therefore, closest to the IRR of the project.

13. Correct answer: C

2011 Modular Level I, Vol. 1, pp. 366-369   Study Session 2-7-e

Define, calculate, and interpret measures of central tendency, including the population mean, sample mean, arithmetic mean, weighted average or mean (including a portfolio return viewed as a weighted mean), geometric mean, harmonic mean, median, and mode.

The portfolio return is the weighted mean return and is calculated as: $(0.45\times16)+(0.25\times12)+(0.30\times2)=10.80$

14. Correct answer: B

2011 Modular Level I, Vol. 1, pp. 396-399   Study Session 2-7-i

Define. Calculate, and interpret the coefficient of variation and the Sharpe ratio.

The Sharpe ratio is defined as: $S_p = \dfrac{R_p - R_F}{S_p}$

In this case, $S_A = (10-4)/20 - 0.30$

$\qquad\qquad S_B = (18-4)/15 - 0.9333$

$\qquad\qquad S_C = (6-4)/3 - 0.6667$

Portfolio B has the highest Sharpe ratio.

15. Correct answer: A

2011 Modular Level I, Vol. 1, p. 445   Study Session 2-8-g

Distinguish between dependent and independent events.

Two events, A and B, are independent if and only if $P(A|B)=P(A)$ or, equivalently, $P(A|B)=P(B)$. The wording of the question precludes $P(A)=P(B)$; therefore, responses B and C cannot be correct.

16. Correct answer: A

2011 Modular Level I, Vol. 1, p. 557   Study Session 3-10-e

Calculate and interpret the standard error of the sample mean.

When the population variance is unknown, the standard error of the sample mean is calculated as:

$$s_x = \frac{s}{\sqrt{n}}$$

where s is the sample standard deviation and n is the size of the sample.

The sample standard deviation is:

$$s = \left[\sum_{i=1}^{n}(X_i - \bar{X})^2 \div (n-1)\right]^{0.5}$$

In this problem, $X=[(10+20-8+2-9+5+0-8+3+21-11+5+3+7+11-5-8+12-6+6)/20=2.50$

$S^2=(10-2.5)^2+(20-2.5)^2+(-8-2.5)^2+(2-2.5)^2+(-9-2.5)^2+(5-2.5)^2+(0-2.5)^2+(-8-2.5)^2+(3-2.5)^2+(21-2.5)^2+(-11-2.5)^2+(5-2.5)^2+(3-2.5)^2+(7-2.5)^2+(11-2.5)^2+(-5-2.5)^2+(-8-2.5)^2+(12-2.5)^2+(-6-2.5)^2+(6-2.5^2)]/19=89.105$ and s = 9.400

The standard error of the mean is therefore $9.440/20^{0.5}=2.111$

17. Correct answer: B

2011 Modular Level I, Vol. 2, pp. 42-43 (Fig. 2, p. 42)   Study Session 4-14-b

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

Consumer surplus is the value (or marginal benefit) of a good minus the price paid for it, summed over the quantity bought. As no consumer will (willingly) pay a price greater than the marginal value or benefit, consumer surplus is always positive. Abd uf firce us used to coerce the consumer to buy a product, then the marginal benefit must be adjusted also so as to include the benefit of avoiding the punishment for not buying the product.

18. Correct answer: B
2011 Modular Level I, Vol.2, pp. 267-268   Study Session 5-21-a
Explain why demand for the factors of production is called derived demand, differentiate between marginal revenue and marginal revenue product (MRP), and describe how the MRP determines the demand for labor and the wage rate.

Marginal revenue product equals the change in total revenue divided by the change quantity of labor: MRP=$\triangle$TR/$\triangle$L. In this problem, the marginal product of hiring the fifth and sixth workers ($\triangle$L=2) is 14 shirts per hour. The change in total revenue for hiring the fifth and sixth workers is 14×$3.00 and the MRP=(14×3)/2=21

19. Correct answer: B
2011 Modular Level I, Vol. 2, pp. 303-305   Study Session 5-22-a
Define an unemployed person and interpret the main labor market indicators.

For a given working-age population, a decline in the labor force participation rate, often due to an increase in discouraged workers, reduces the labor force. If the number of people employed remains the same while the labor force is smaller, the number of workers defined to be unemployed must be smaller and the unemployment rate lower.

20. Correct answer: C
2011 Modular Level I. Vol. 2, pp. 371-372, 376   Study Session 6-24-d
Explain the goals of the U.S. Federal Reserve (Fed) in conducting monetary policy and how the Fed uses its policy tools to control the quantity of money, and describe the assets and liabilities on the Fed's balance sheet.

When a central bank such as the Fed purchases securities, bank reserves increase. The banks therefore have excess reserves and are able to increase their lending, increasing the money supply. See the sequence of events given on p. 376 of the reading,

21. Correct answer: B
2011 Modular Level I Vol. 2, pp. 193, 206-208   Study Session 4-19-c
Explain price discrimination and why perfect price discrimination is efficient.

In perfect price discrimination, all surplus is captured by the producer. Consumer surplus falls to zero.

22. Correct answer: A
2011 Modular Level I, Vol. 2, pp. 377-380
"Fiscal Policy," Michael Parkin
2011 Modular Level I, Vol. 2, pp. 445-446   Study Sessions 6-24-f, 6-26-d
Describe the monetary base and explain the relation among the monetary base, the money multiplier, and the quantity of money.
Discuss the use of fiscal policy to stabilize the economy, including the effects of the government expenditure multiplier, the tax multiplier, and the balanced budget multiplier.

The balanced budget multiplier and the government expenditure multiplier are part of fiscal policy. The money multiplier is best thought of as part of monetary policy,

23. Correct answer: B
2011 Modular Level I, Vol. 3, pp. 18-22   Study Session 7-29-d
Discuss the objective of audits of financial statements, the types of audit reports, and the importance of effective internal controls.

For a publicly traded firm in the United States, the auditor must express an opinion as to whether the company's internal control system is in accordance with the Public Accounting Oversight Board, under the Sarbanes-Oxley Act. This is done either as a final paragraph in the Auditor's Report, or as a separate opinion.

24. Correct answer: A
2011 Modular Level I, Vol. 3, pp. 62-65   Study Session 7-30-d
Explain the need for accruals and other adjustments in preparing financial statements.

The adjusting entry to record the expiry of a prepaid expense is the reduction of an asset (the prepaid) and the recognition of the expense.

25. Correct answer: C
2011 Modular Level I, Vol. 3, pp. 223-230   Study Session 8-33-f, g
Demonstrate the appropriate classifications and related accounting treatments for marketable and nonmarketable financial instruments held as assets or owed by the company as liabilities.
List and explain the components of owners' equity.

Shareholders' Equity (¥)		
Start-of-year share capital		200,000
Less treasury stock		(6,000)
Beginning retained earnings	50,000	
Plus net income	42,000	
Less dividends paid	(7,000)	
Ending retained earnings	85,000	85,000
Accumulated other comprehensive income Foreign		$8,000

currency translation adjustment gain		
End-of-year shareholders' equity		**287,000**
The realized loss on the available-for-sale investments is already accounted for in net income.		

26. Correct answer: A

2011 Modular Level I, Vol. 3, pp. 267-268   Study Session 8-34-e
Demonstrate the steps in the preparation of direct and indirect cash flow statements, including how cash flows can be computed using income statement and balance sheet data.

Cash collected from customers=Revenues-increase in AR=$100-(25-13.5)=88.5

27. Correct answer: A
2011 Modular Level I, Vol. 3, 213-215   Study Sessions 8-35-f, 11-49
Demonstrate the application of and interpret changes in the component parts of the DuPont analysis (the decomposition of return on equity).

	Calculation	Company	Industry
EBIT Margin	EBIT/Sales	76,000/400,000=0.19	28.0/100=0.28
Tax Burden ratio	Net Inc/EBT	44,488/66,400=0.67	13.1/19.6=0.67
Interest Burden ratio	EBT/EBIT	66,400/76,000=0.87	19.6/28.0=0.70
The company has a higher interest burden ratio bur a lower EBIT margin than the industry, and the same tax burden ratio; the lower EBIT margin relative to the industry is the cause of the company's poor relative performance			
EBI: Pretax profit (earnings before tax) **Net Inc:** Net Income			

28. Correct answer: A
2011 Modular Level I, Vol. 3, p. 156   Study Sessions 8-31-e, 8-32-c
Explain the general requirements for financial statements.
Discuss the general principles of expense recognition, such as the matching principle, specific expense recognition applications (including depreciation of long-term assets and inventory methods), and the implications of expense recognition principles for financial analysis.

The five fundamental principles underlying the preparation of financial statements under the IFRS Framework are fair presentation, going concern, accrual basis, consistency, and materiality. Matching is a general principle of expense recognition.

29. Correct answer: B
2011 Modular Level I, Vol. 3, pp. 459-461, 480-485   Study Session 9-38-d, i
Calculate income tax expense, income taxes payable, deferred tax assets, and deferred

tax liabilities, and calculate and interpret the adjustment to the financial statements related to a change in the income tax rate.

Analyze disclosures relating to deferred tax items and the effective tax rate reconciliation, and discuss how information included in these disclosures affects a company's financial statements and financial ratios.

Income tax expense reported on the income statement=income tax payable+ net changes in the deferred tax assets and deferred tax liabilities. The change in the net deferred tax liability is a $50 increase (indicating that the income tax expense is $50 in excess of the income tax payable (or current income tax expense)) and representing an increase in the expense.

Therefore, the income tax expense= $1,000+50= $1,050

30. Correct answer: C

2011 Modular Level I, Vol. 3, p. 381　　　　　　　Study Session 9-36-b

Describe different inventory valuation methods (cost formulas).

Specific identification best matches the physical flow of the inventory items because it tracks the actual units that are sold.

31. Correct answer: C

2011 Modular Level I, Vol. 3, pp. 437, 449　　　　Study Session 9-37-i

Discuss the derecognition of property, plant and equipment, and intangible assets.

Long-lived assets that will be disposed of other than by sale (such as a spin-off, an exchange for other assets, or abandonment) are classified as held for use until disposal and continue to be depreciated until that time.

32. Correct answer: C

2011 Modular Level I, Vol. 3, pp. 538-541

Study Session 9-39-j, k

Describe defined contribution and defined benefit pension plans,

Compare and contrast the presentation and disclosure of defined contribution and defined benefit pension plans.

The pension expense would be the sum of the expense for the defined contribution plan and the defined benefit plan (retirement benefit obligation): 1,525+728=2,253

33. Correct answer: A

2011 Modular Level.I, Vol. 3, pp. 542-545　　　　Study Sessions 8-35-d, 9-39-I

Calculate, classify, and interpret activity, liquidity, solvency, profitability, and valuation ratios.

Calculate and interpret leverage and coverage ratios.

The debt-to-equity ratio decreased thereby improving solvency; the fixed charge coverage ratio remained the same.

	2010	2009	Comments
Debt-to-equity (total debt/equity)	$\dfrac{(2,240 + 2,000 + 12,000)}{23,250}$ = 70%	$\dfrac{(5,400 + 1,200 + 9,000)}{21,175}$ = 74%	Ratio decreased: company has less financial risk; is more solvent
Fixed charge coverage ratio = $\dfrac{EBIT + lease\ pmts}{Int\ pmts + lease\ pmts}$	$\dfrac{3,850 + 800}{855 + 800}$ = 2.81	$\dfrac{3,800 + 800}{837 + 800}$ = 2.81	No change in FCC ratio

34. Correct answer: A
2011 Modular Level I, Vol, 3, pp.578-579   Study Sessions 9-39-I, 10-41
Compare and contrast the disclosures relating to finance and operating leases.
The candidate should be able to analyze and discuss the following ways to manipulate the cash flow statement

● Stretching out payables,
● Financing of payables,
● Securitization of receivables, and
● Using stock buybacks to offset dilution of earnings.

An increase in the days sales payable would indicate the company is stretching out its payables, which would increase the cash from operations.

35. Correct answer: B
2011 Modular Level I, Vol. 4, p. 8
Study Session 11-44-b
Discuss the basic principles of capital budgeting, including the choice of the proper cash flows.

Financing costs are not included in a cash flow calculation, but are considered in the calculation of the discount rate.

36. Correct answer: C

2011 Modular Level I, Vol. 4, pp. 41-42
Study Session 11-45-a, b
Calculate and interpret the weighted average cost of capital (WACC) of a company.
Describe how taxes affect the cost of capital from different capital sources.

$WACC = w_d r_d (1-t) + w_p r_p + w_e r_e = [0.12 \times (1-0.40) + 0.17 + 0.20]/3 = 14.73\%$

37. Correct answer: C

2011 Modular Level I, Vol. 4, pp. 10-13, 17-19   Study Session 11-44-d, e

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

Explain the NPV profile, compare and contrast the NPV and IRR methods when evaluating independent and mutually exclusive projects, and describe the problems associated with each of the evaluation methods.

Discount Rate	NPV	Calculation
15%	-100	$=-\$606,061+\$2,151,515/(1.15)-\$2,542,424/(1.15)^2+\$1,000,000/(1.15)^3$
18&	-42	$-\$606,061+\$2,151,515/(1.18)-\$2,542,424/(1.18)^2+\$1,000,000/(1.18)^3$
21%	+15	$-\$606,061+\$2,151,515/(1.21)-\$2,542,424/(1.21)^2+\$1,000,000/(1.21)^3$
The NPV at 21% is $15 while the other two NPVs are negative.		

38. Correct answer: A

2011 Modular Level I, Vol. 4, pp. 198-200   Study Session 11-48-g

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

Method	Effective Annual Cost	Formula	Calculation
BA	6.13%	$\dfrac{\text{Interest} \times 12}{\text{net proceeds}}$	$\dfrac{6.1\% / 12 \times \$2,000,000 \times 12}{(\$2,000,000 \times [1 - 0.061 / 12])}$
Line of credit	6.5%	$\dfrac{(\text{interest} + \text{commitment fee}) \times 12}{\text{usable loan amount}}$	$\dfrac{(6.0\% / 12 \times \$2,000,000 + 0.5\% / 12 \times \$2,000,000) \times 12}{\$2,000,000}$
CP	6.28%	$\dfrac{(\text{interest} + \text{dealer's commission} + \text{backup costs}) \times 12}{\text{net proceeds}}$	$\dfrac{(5.9\% / 12 \times \$2,000,000 + \$3,000 / 12 + \$4,000 / 12) \times 12}{(\$2,000,000 \times [1 - 0.059 / 12])}$
Banker's acceptance has the lowest annual effective cost of 6.13%.			

39. Correct answer: C

2011 Modular Level I, Vol. 4, pp. 97-98   Study Session 11-46-b

Calculate and interpret the degree of operating leverage, the degree of financial leverage, and the degree of total leverage.

$$\text{DOL} = \frac{(\text{Revenues} - \text{Variable Operating Costs})}{(\text{Revenues} - \text{Variable Operating Costs} - \text{Fixed Operating Costs})}$$

$$= \frac{(\$9.8 - \$7.2)}{(\$9.8 - \$7.2 - \$1.5)}$$

$$= 2.36 \Rightarrow 2.4$$

40. Correct answer: C
2011 Modular Level I, Vol. 5, pp. 51-53   Study Session 13-55-g, h
Compare and contrast execution, validity, and clearing instructions.
Compare and contrast market orders with limit orders.
Investors who have entered into a short sale will incur losses if the stock begins to increase in value. A stop-buy order helps limit the loss on a short position, as it becomes valid when the stock price rises above the specified stop price.

41. Correct answer: C
2011 Modular Level I, Vol.5, p. 171   Study Session 11-50-g, 14-58-d
Evaluate, from a shareowner's perspective, company policies related to voting rules, shareowner sponsored proposals, common stock classes, and takeover defenses.
Discuss the differences in voting rights and other ownership characteristics among various equity classes.

Cumulative voting allows shareholders to direct their total voting rights to specific candidates, as opposed to having to allocate their voting rights evenly among all candidates. Thus, applying all of the votes to one candidate provides the opportunity for a higher level of representation on the board than would be allowed under statutory voting.

42. Correct answer: A
2011 Modular Level I, Vol. 5, pp. 276-277   Study Session 14-60-d
Calculate the intrinsic value of a non-callable, non-convertible preferred stock.
$V_0 = D_0/r = (\$100 \times 0.06)/0.115 = \$52.17$

43. Correct answer: A
2011 Modular Level I, Vol. 5, pp. 279-281
Study Session 14-60-e
Calculate and interpret the intrinsic value of an equity security based on the Gordon (constant) growth dividend discount model or a two-stage dividend discount model, as appropriate.

Dividend growth rate over the period 2004-2009= $1.25 \times (1+g)^5 = 1.92$; g=8.96%=9%
Sustainable growth rate for the year 2009;
b=earnings retention rate= (1-Dividend payout ratio)=[1-(1.92/3.20)]=0.40
g= b×ROE; g=0.40×12%=4.8%
Average of the two approaches=(9+4.8)/2=6.90%
$V_0 = D_1/(r-g) = (\$1.92 \times 1.069)/(0.15-0.069) = \$2.05/0.081 = \$25.31$

44. Correct answer: C
2011 Modular Level I, Vol, 5, pp. 109-110   Study Session 13-56-j
Discuss indices representing alternative investments.

Commodity index returns reflect the risk-free interest rate, the changes in futures prices,

and the roll yield. Changes in the underlying commodity price are not directly reflected in a commodity index.

45. Correct answer: C

2011 Modular Level I, Vol. 5, pp. 44-45   Study Session 13-55-f

Calculate and interpret the leverage ratio, the rate of return on a margin transaction, and the security price at which the investor would receive a margin call

Proceeds on sale: $55×500	$27,500
Payoff loan: $55×500×0.55	-$13,750
Margin interest paid: $13,750×0.06	-$825
Dividend received: $1,80×500	+$900
Sales commission paid: $0.05×500	-$25
Remaining equity	$13,800
Initial investment (including commission): ($50×500×0.45)+($0.05×500)	$11,275
Return on the initial investment: ($13,800-$11,275)/$11,275	22.4%

See Example 19 on pp. 44-45

46. Correct answer; B

2011 Modular Level I, Vol. 6,pp. 18-20   Study Session 17-68-d

Discuss the purposes and criticisms of derivative markets.

Derivative markets improve market efficiency for the underlying assets by increasing market fairness and competitiveness, not by lowering transaction costs. Lower transaction costs is a characteristic of derivative markets that is required for them to exist, not a purpose for derivative markets.

47. Correct answer: B

2011 Modular Level I, Vol. 6, pp. 55-59   Study Session 17-70-c

Differentiate between margin in the securities markets and margin in the futures markets, and explain the role of initial margin, maintenance margin, variation margin, and settlement in futures trading.

On any day when the balance in the margin account falls below the maintenance margin, the trader must deposit sufficient funds to bring the balance back up to the initial margin requirement. This additional amount is called the variation margin. Therefore, $100-$40=$60 variation margin.

48. Correct answer: C

2011 Modular Level I, Vol. 6, pp. 144-147   Study Session 17-72-b

Define, calculate, and interpret the payment of currency swaps, plain vanilla interest rate

swaps, and equity swaps.

The portfolio manager pays the Value Index return, which had a loss, and receives the Growth Index, which had a gain during the period. Therefore, the portfolio manager will receive a cash flow from the swap dealer.

Value Index payment:[(5,350/5,460)-1] ×$50,000,000=$(1,007,326)

Growth Index payment: [(1,200/1,190)-1]v$20,000,000=$420,168

Net payment to portfolio manager= $420,168-$(1,007,326)=$1,427,494

49. Correct answer: B
2011 Modular Level I. Vol. 6, pp. 189-192   Study Session 18-74-a

Differentiate between an open-end and a closed-end fund, and explain how net asset value of a fund is calculated and the nature of fees charged by investment companies.

NAV calculation first deducts the sales charge at t=o and then compounds the annual return. The NAV also reflects the compounded deduction of the annual expenses.

50. Correct answer: C
2011 Modular Level I, Vol. 6, pp. 227-229   Study Session 18-74-1

Discuss the performance of hedge funds, and the biases present in hedge fund performance measurement, and explain the effect of survivorship bias on the reported return and risk measures for hedge fun database.

The hedge fund managers themselves decide whether they want to be included in a database. Managers who have funds wit an unimpressive track record will not wish to have that information exposed.

51. Correct answer: A
2011 Modular Level I, Vol. 6, pp. 262-263   Study Session 18-75-a

Explain the relationship between spot prices and expected futures prices in terms of contango and backwardation.

When a commodity market is in contango. Futures prices are higher than the spot price as market participants believe the spot price will be higher in the future. When spot prices are above the futures prices, the market is said to be in backwardation,

52. Correct answer: A
2011 Modular Level I, Vol. 5, p. 337   Study Session 15-31-e

Indentify the common options embedded in a bond issue, explain the importance of embedded options, and state whether such options benefit the issuer or the bondholder.

The floor guarantees a minimum rate that the investor will earn

53. Correct answer: A

2011 Modular Level I, Vol. 5, p. 354   Study Session 15-62-c

Explain how features of a bond (e.g., maturity, coupon, and embedded options) and the level of a bond's yield affect the bond's interest rate risk.

A lower coupon rate means that more of the bond's value comes from repayment of face value, which occurs at the end of the bond's life.

54. Correct answer: B

2011 Modular Level I, Vol. 5, pp. 359-363   Study Session 15-62-g

Describe yield-curve risk and explain why duration does not account for yield-curve risk for a portfolio of bonds.

Duration measures the change in the price of a portfolio of bonds assuming that the yield for all maturities changes by the same amount.

55. Correct answer: C

2011 Modular Level I, Vol.5, pp. 464=465   Study Session 15-64-i

Calculate the after-tax yield of a taxable security and the tax-equivalent yield of a tax-exempt security.

The tax-equivalent yield= tax-exempt yield/ (1-marginal tax rate)
=5.20%/(1-0.335)=7.82%

56. Correct answer: C

2011 Modular Level I, Vol. 5, pp. 456-457   Study Session 15-64-e

Calculate, compare, and contrast the various yield spread measures,

The relative yield spread= (bond yield-reference yield)/reference yield
=(7.39%-4.26%)/4.26%=73.5%

57. Correct answer: B

2011 Modular Level I, Vol. 5, pp. 538-539   Study Session 16-66-b

Calculate and interpret the traditional yield measures for fixed-rate bonds and explain their limitations and assumptions.

A security with a present value of 96.47, 19 interest payments of 8, and a 20th payment of principal plus interest (108) has a yield to maturity of 8.37%

58. Correct answer: B

2011 Modular Level I, Vol. 4, pp. 287-293   Study Session 12-51-b

Discuss the types of investment management clients and the distinctive characteristics and needs of each.

Endowments have a long investment time horizon and a high level of risk tolerance

(Exhibit 14)

59. Correct answer: A

2011 Modular Level I, Vol. 4, pp. 330-332   Study Session 12-52-e

Calculate and interpret portfolio standard deviation.

Portfolio standard deviation

$$= \sqrt{[(0.68)^2)(0.30^2) + (0.32^2)(0.2^2) + 2(0.68)(0.32)(0.65)(0.3)(0.2)}$$

$$= 0.2504$$

60. Correct answer: B

2011 Modular Level I, Vol. 4, pp. 410-413   Study Session 12-53-e

Calculate and interpret beta

$$\beta = \frac{\rho_{im}\sigma_i\sigma_m}{\sigma_m^2}$$

$$\frac{0.45 \times 0.1235 \times 0.08285}{0.0825^2} = 0.67$$