

2008 Level 1 Sample Exam Volume 2

Answer

6. Answer: C

Study Session 1-4-b

Describe the scope of the GIPS standards with respect to an investment firm's definition and historical performance record

A firm must initially show GIPS-compliant history for a minimum of five years, or since inception if the firm has been in existence for less than five years.

9. Answer: A

Study Session 1-2-a

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

Member should use reasonable care and judgment to maintain independence and objectivity. There is no indication of inappropriate behavior in selection of the equity manager or in the acceptance of employment with that manager; both decisions were based on the excellent performance records of the manager and the member, respectively.

15. Answer: D

Study Session 2-7-h

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

The coefficient of variation is the standard deviation of returns divided by the mean returns, and the Sharpe ratio is the excess return divided by the standard deviation.

$$CV = 15.7 / 12.8 = 1.23$$

$$\text{Sharpe ratio} = 7.4 / 15.7 = 0.47$$

16. Answer: B

Study Session 3-9-i

define shortfall risk, calculate the safety-first ratio, and select an optimal portfolio using Roy's safety-first criterion

The Sharpe ratio is equivalent to using the risk-free rates as the shortfall level in Roy's safety-first criterion. The higher the safety-first ratio, the lower is the probability of earning less than the risk-free rate.

17. Answer: C

Study Session 5-19-c

explain price discrimination, and why perfect price discrimination is efficient

The prices for the group with inelastic demand will increase. For example, air travelers, business versus vacationers, face different demand curves.

Business travelers end up paying high and vacationers benefit by paying less.

19. Answer: A

Study Session 4-16-d

explain command systems and incentive systems to organize production, the principal-agent problem, and measures that a firm uses to reduce the principal agent problem

Agents can and do exercise their own judgment and, because agents cannot be completely monitored, agents have opportunities to serve their own ends instead of those of the principal.

20. Answer: A

Study Session 6-27-b

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

The increase in government borrowing to finance the higher expenditures will put upward pressure on real interest rates. This in turn will slow private investment and attract an inflow of capital from abroad.

21. Answer: C

Study Session 4-13-a

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

Demand is relatively elastic, since the absolute value of the elasticity coefficient is greater than unity ($10 / -5 = -2$). Total revenues will expand.

22. Answer: C

Study Session 4-15-d

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

In markets with perfectly elastic supply, price increases as a result of tax and the seller passes on the tax burden to buyers. In markets with perfectly inelastic supply, sellers maintain the same supply and price but absorb the tax burden themselves.

23. Answer: C

Study Session 9-40-c

describe the types of off-balance-sheet financing and analyze their effects on selected financial ratios

The adjustment would increase both assets and debt. The increase in assets would decrease the ROA and the increase in debt would increase the debt-to-equity ratio, because equity would not change.

24. Answer: B

Study Session 9-37-b

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

A longer useful life and higher salvage value are consistent with lower depreciation expense, which results in a higher net asset value. Asset turnover (Sales/Total assets) would decrease because sales would be constant while assets would be higher due to smaller depreciation charges.

26. Answer: B

Study Session 7-30-a

identify the groups (operating, investing, and financing activities) into which business activities are categorized for financial reporting purposes and classify any business activity into the appropriate group

For a bank, lending money and earning interest on it is an operating activity; but for a manufacturing company, they are not in the business of lending or investing money and the interest they receive would be more correctly classified as an investing activity.

27. Answer: C

Study Session 7-30-d

explain the process of recording business transactions using an accounting system based on the accounting equations

The company would create (increase) a liability for dividends payable and deduct the same amount from its retained earnings, thus decreasing owners' equity.

28. Answer: B

Study Session 9-39-a

distinguish between operating and trade debt related to operating activities and debt generated by financing activities, and discuss the analytical implications of a shift between the two types of liabilities

A shift from operating debt to financing liabilities may indicate a company has reduced access to trade credit and may signal the beginning of a liquidity crisis.

29. Answer: D

Study Sessions 8-32-k, 8-33-h

state the accounting classification for items that are excluded from the income statement but affect owners' equity, and list the major types of items receiving that treatment;

describe and calculate comprehensive income;

list and explain the components of owners' equity

The statement of stockholders' equity includes accumulated other comprehensive income, which contains the unrealized gains and losses on available-for-sale securities.

30. Answer: C

Study Session 8-32-b

explain the general principles of revenue recognition and accrual accounting, demonstrate specific revenues recognition applications (including accounting for long-term contracts, installment sales, barter transactions, and gross and net reporting of revenue), and discuss the implications of revenue recognition principles for financial analysis

Compared to the completed-contract method, the percentage-of-completion method will most likely result in higher total assets, reflecting the accrual of gross profit during the contract period and lower liabilities, as the higher level of construction-in-progress provides a larger offset to advance billings.

31. Answer: C

Study Session 8-34-a

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

Cash dividends paid are reported as a cash outflow in the cash flow from financing activities section on the statement of cash flows.

32. Answer: A

Study Session 8-34-h

analyze and interpret a cash flow statement using both total currency amounts and common-size cash flow statements

Sales, net income, and net margin are relatively constant for the two years. The substantial drop in cash flow from operations could be attributed to an increase in receivables and/or inventory. A decrease in the proportion of cash sales implies an increase in the proportion of credit sales, increasing accounts receivable. An increase in accounts receivable would decrease cash flow from operations.

33. Answer: C

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

analyze and interpret a cash flow statement using both total currency amounts and common-size cash flow statements;

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

Accruing wages increases current liabilities, but collecting receivables has no effect on current assets; the current ratio decreases. Collecting accounts receivable increases cash flow from operations and accruing wages increases current liabilities, which also increases cash flow from operations.

35. Answer: D

Study Session 11-44-a

explain the capital budgeting process, including the typical steps of the process, and distinguish among the various categorizes of capital projects

The two main purposes of the post-adult process are to improve forecasts and to improve operations.

37. Answer: B

Study Session 11-44-b

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

determining the proper discount rate

The \$400,000 original cost is a sunk cost that should not be considered in evaluating the net present value of the project under consideration, the \$600,000 market value is an opportunity cost and should be considered in evaluating the project's net present value.

39. Answer: C

Study Session 11-46-a,b

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

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

The operating cycle = number of days of inventory + number of days of receivables = $48 + 37 = 85$.

The cash conversion cycle = number of days of inventory + number of days of receivables – number of days of payables = $48 + 37 - 28 = 57$.

41. Answer: B

Study Session 13-52-f

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

A short sale is the sale of borrowed stock with the intention of buying the stock back later at a lower price.

42. Answer: B

Study Session 14-61-b

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

Using average ROE provides a better estimate of P/E when a company's size has changed. The average ROE is 9.25; an estimate of normal earnings per share can be derived by multiplying average ROE by ending book value per share;

$0.0925 \times 16.30 \text{ per share} = \$1.51 \text{ normal earnings per share.}$

44. Answer: C

Study Session 14-60-c

show how to use the DCM to develop an earnings multiples model and explain the factors in the DCM that affect a stock's price-to-earnings (P/E) ratio

The constant growth dividend model and the earnings multiples model will result in the same value for a share of stock. Using the constant growth model, the value is $(\$3.00)(1.07)$ or $\$3.21$ divided by the required rate of return minus the growth rate: $\$3.21/0.08 = \40.125 . The earnings multiplier is the dividend payout ratio divided by the required rate of return minus the growth rate: $0.6/0.08 = 7.5$. Next year's expected earnings are $\$5.00 (1.07) = \5.35 . $\$3.21/5.35 = 0.6$.

46. Answer: C

Study Session 17-70-c

discuss the purposes and criticisms of derivative markets

The volatility of the underlying asset is critical to the value of an option. Options reveal more about volatility than about spot prices. Futures, forwards, and swaps are more directly related to price discovery.

47. Answer: A

Study Session 17-70-b

define a forward commitment and a contingent claim, and describe the basic characteristics of forward contracts, futures contracts, options (calls and puts), and swaps

A swap is equivalent to a series of forward contracts.

49. Answer: B

Study Session 18-76-i

discuss the descriptive accuracy of the term "hedge fund," define hedge fund in terms of objectives, legal structure, and fee structure, and describe the various classifications of hedge funds

Hedge funds focus on absolute returns and place specific bets in the search for positive alphas. Because the fee structure includes a small base fee plus an incentive fee proportional to profits, hedge funds have an option-like fee structure.

50. Answer: B

Study Session 18-76-i

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 a hedge fund database

Survivorship bias affects both the returns and the risk (standard deviation) reported for the hedge funds. Hedge funds with low or negative returns will be excluded from the index as will funds with high volatility; those funds will not survive for eight years. If only the successful funds remain in the index, the returns are overstated and the risk is understated. Overstated returns and understated risk will both tend to overstate the Sharpe ratio.

55. Answer: C

Study Session 15-65-f

describe a credit spread and discuss the suggested relationship between credit spreads and the economic well-being of the economy

Credit spreads tend to widen during an economic contraction and tend to narrow during an economic expansion.

56. Answer: D

Study Session 15-65-e

compute, compare, and contrast the various yield spread measures

Because the default-free bond (government bond) is the benchmark bond. The relative yield spread is $(6.15 - 4.2) / 4.2 = 0.464$ and the yield ratio is $6.15/4.2 = 1.46$.

57. Answer: B

Study Session 15-63-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

Price of a callable bond = price of an option-free bond – price of embedded call option. As interest rates decline, the price of the option-free bond rises.

However, the price of the embedded call option also rises. Consequently, the price of a callable bond rises by less than the price of an otherwise identical option-free bond.

60. Answer: C

Study Session 12-51-a

explain the capital market theory, including its underlying assumptions, and explain the effect on expected returns, the standard deviation of returns, and possible risk/return combinations when a risk-free asset is combined with a portfolio of risky assets

The variance of a portfolio consisting of a risky asset and a risky portfolio is

$$\sigma_p^2 = (1 - w_M)^2 \sigma_{RF}^2 + w_M^2 \sigma_M^2 + 2(1 - w_M)w_M \sigma_{RF} \sigma_M \rho_{RF,M}$$

Because the variance of the risk-free asset is zero, $\sigma_{RF}^2 = 0$, the equation simplifies to

$$\sigma_{Port}^2 = (1 - w_{RF})^2 \sigma_i^2$$

The standard deviation is $\sigma_{Port} = (1 - w_{RF})\sigma_i$. Thus the standard deviation of the portfolio is a linear function of the standard deviation of the risky asset portfolio.

The resulting graph of possible portfolio return and risk combinations is also linear, meaning that it will display constant, not increasing, incremental return per unit of incremental risk change.