2008 Level 1 Sample Exam Volume 1 Answer

10. Answer: D
Study Session 3-10-j
Calculate and interpret a confidence interval for a population mean, given a normal distribution with 1) a known population variance, 2) an unknown population variance, or 3) an unknown variance and a large sample size
The standard error becomes smaller as the sample size increases. An increase in sample size increases degrees of freedom, reducing the reliability factor. A reduction in both the standard error and the reliability factor decrease the width of the confidence interval. A decrease in both would increase the width.

14. Answer: C
Study Session 3-9-g
Construct and interpret a confidence interval for a normally distributed random variable, and determine the probability that a normally distributed random variable lies inside a given confidence interval
Given that sales are normally distributed, the mean is centered in the interval.
Mean = ($230,000 + 480,000) / 2 = $355,000
An interval including 99% of the observations extends three standard deviations either side of the mean. The standard deviation of daily sales = ($355,000 – 230,000) / 3 = $41,667.

17. 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
A decrease in the price of a substitute resource would induce producers to use the substitute resource, reducing demand for the resources in question.
An increase in the price of a complementary resource would decrease demand for both resources.

18. Answer: D
Study Session 5-22-c
Explain the types of unemployment, full employment, the natural rate of unemployment, and the relation between unemployment and real GDP
Structural unemployment results from changes in the basic characteristics of the economy., such as changes or technology or international competition, which typically require changes in skills needed to perform jobs.

19. Answer: D
Study Session 6-26-e
Explain the impact of inflation on unemployment, and describe the short-run and long-run Philips

curve, including the effect of changes in the natural rate of unemployment
It is the difference between actual and expected rates of inflation that influences unemployment. Unemployment rises when decision-makers overestimate the inflation rate.

20. Answer: B
Study Session 4-14-e
Explain 1) how efficient markets ensure optimal resource utilization and 2) the obstacles to efficiency and the resulting underproduction or overproduction, including the concept of deadweight loss
Public goods can be consumed simultaneously by everyone and it is not in each person's interest to buy her or his share of a public good.

21. Answer: D
Study Session 6-28-e
Compare and contrast the new monetarist and new Keynesian feedback rules
The McCallum rule, in the spirit of a monetarist fixed rule, attempts to make adjustments to the monetary base while targeting the inflation rate. On the other hand, the Taylor rule takes a Keynesian perspective and attempts to adjust the federal funds rate while targeting the inflation rate.

23. Answer: A
Study Session 9-39-b
Determine the effects of debt issuance and amortization of bond discounts and premiums on the financial statements and ratios
The liability and interest expense recorded are both based on market rates of interest when the bond was issued and not the coupon rate on the bond.
The market value of the bond at issuance was $961,39. Interest expense is the market rate at date of issuance multiplied by the balance of the liability.
($961.39) (0.05) = $48.07

24. Answer: D
Study Session 9-38-f,g
Calculate and interpret income tax expense, income taxes payable, deferred tax assets, and deferred tax liabilities;
Calculate and interpret the adjustment(s) to the deferred tax accounts related to a change in the tax rate
In the case of a tax rate decrease, the greatest reduction in reported equity would go to the firm with the largest net deferred tax asset. The net deferred tax asset for Company 4 is $55,000($170,000 - $115,000), which is the largest of the group.

25. Answer: A
Study Session 10-43-c
Identify and explain the major difference between international and U.S. GAAP accounting standards concerning the treatment of interest and dividends on the cash flow statement
U.S. GAAP requires that interest paid be classified as cash from operations; IAS GAAP allows interest paid to be classified as either CFO or CFF.

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.

29. Answer: D
Study Sessions 10-41-f, 11-47-a
Demonstrate the application of Du Pont analysis (the decomposition of return on equity);
Calculate, interpret, and discuss the Du Pont expression and extended Du Pont expression for a company's return on equity, and demonstrate its use in corporate analysis
ROE = Net Profit Margin × Sales/Total Assets ×Total Assets / Equity = 4.00 × 2.80 ×1.60 = 17.92%
Alternatively, ROE = Return on Total Assets * Total Assets / Equity = 11.20 ×1.60 = 17.92%.

30. Answer: D
Study Session 10-41-a
Evaluate and compare companies using ratio analysis, common-size financial statements, and charts in financial analyst
A common-size balance sheet expresses all balance sheet accounts as a percentage of total assets.

32. 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.

33. Answer: C
Study Session 8-32-b
explain the general principles of revenue recognition and accrual accounting, demonstrate specific revenue 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
The IASB conditions that must be met include that the costs incurred can be reliably measured and the assurance of payment, not the actual receipt.

34. Answer: D
Study Session 9-35-b,c
Explain the relationship among and the usefulness of inventory and cost of goods sold data provided

by the LIFO, FIFO, and average cost methods when prices are (1) stable or (2) changing;
Compare and contrast the effect of the different methods on cost of goods sold and inventory balances, and discuss how a company's choice of inventory accounting method affects other financial items, such as income cash flow and working capital
If prices were declining, using LIFO would match the lower (most recent) costs with current sales. Costs of goods sold would be lower with LIFO and gross profit (income) would be higher compared to using FIFO. Lower cost of goods sold means inventory balances, consisting of older, higher-priced items, would be higher using LIFO, increasing current assets relative to FIFO.

35. Answer: D
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 increase in ice cream sales (externality) should be treated as an incremental cash flow and should be included in the analysis of the project's net present value.

36. Answer: B
Study Session 11-44-e
Explain the NPV profile, compare and contrast the NPV and IRR methods when evaluating independent and mutually exclusive projects, and describe the problems that can arise when using an IRR.
The NPV and IRR methods lead to conflicting decisions when the cost of capital is less than the crossover rate.

38. Answer: D
Study Session 11-45-a, b
Calculate and interpret liquidity measures using selected financial ration 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. The number of days of receivables is 365 / 5.6 = 65 days for the company and 365 / 6.5 = 56 days for the industry. The number of days of inventory is 365 / 4.2 = 87 days for the company and 365 / 4 = 91 days for the industry. The operating cycles are: 65 + 87 = 152 and 56 + 91 = 147, respectively. The cash conversion cycle = operating cycle – number of days of payables = 152 – 28 = 124 for the company and 147 – 36 = 111 for the industry. Therefore, the operating cycle and cash conversion cycle are both longer for the company.

39. Answer: B
Study Session 13-59-b
Compare and contrast major structural features of domestic and global stock indexes, bond indexes, and composite stock-bond indexes

The vast majority of major bond indexes are calculated based upon trader prices and market value weightings. The major exception is an all Treasury index that is market priced since it contains only Treasury securities.

41. Answer: C
Study Session 13-54-c
Explain the implications of stock market efficiency for technical analysis, fundamental analysis, the portfolio management process, the role of the portfolio manager, and the rationale for investing in index funds
The efficient market hypothesis implies that, to be successful, fundamental analysis must be able to both identify and predict variables that are relevant to the valuation process.

42. Answer: C
Study Session 14-60-e
Estimate the implied dividend growth rate, given the components of the required return on equity and incorporating the earnings retention rate and current stock price
The growth rate for the company is the product of the return on equity (ROE) and the retention rate.
The retention rate is 1- the dividend payout ratio.
The ROE for the company is (5.0%)(2.0)(2.5) = 25%. The retention rate must be at least 60% to achieve a growth of at least 15% (0.60 * 25% = 15%).
If the retention rate is at least 60%, the maximum dividend payout ratio is 40%.

43. Answer: B
Study Session 14-59-b
Describe and estimate the expected earnings per share (EPS) and earnings multiplier for a company and use the multiple to make an investment decision regarding the company.

Compounded Annual Sales Growth --- g%	2008 Sales = 2007 Sales * (1 + g)	2008 EPS = 2008 Sales * NPM / # of Shares
FV = 220; PV = -149.7 N = 5; I / Y = 8%; g = 8%	$220 (1.08) = $237.60 million	$237.60×0.07 / 6 = $2.77

44. Answer: C
Study Session 14-59-a
Differentiate between 1) a growth company and a growth stock, 2) a defensive company and a defensive stock, 3) a cyclical company and a cyclical stock, 4) a speculative company and a speculative stock, and 5) a value stock and a growth stock
A growth company is a firm with the management ability and the opportunities to make investments that yield rates of return greater than the firm's required rate of return. A company following a defensive competitive strategy attempts to position itself to deflect the effect of the competitive forces in the industry. Examples may include investment in fixed assets and technology to reduce its production costs or increasing advertising budgets to establish a strong brand image for products.

46. Answer: B
Study Session 17-74-a

Describe the characteristics of swap contracts and explain how swaps are terminated
Principal amounts are not exchanged at the beginning or end of an interest rate swap; principal amounts are typically exchanged at both the beginning and end of a currency swap.

48. Answer: C
Study Session 17-72-b
Differentiate between margin in the securities markets and margin in the futures markets, and define initial margin, maintenance margin, variation margin, and settlement price
Margin in the stock market involves a loan used to buy securities, whereas margin in the futures market is a down payment or a performance bond.

51. Answer: D
Study Session 18-76-e
Describe the various approaches to the valuation of real estate
Because the after-tax cash flow approach requires specific information about the investor's marginal tax rate, the value of the property to an investor depends on the investor's marginal tax rate.

52. Answer: D
Study Session 16-69-b
Demonstrate the price volatility characteristics for option-free, callable, prepayable, and putable bonds when interest rates change
The bond is option-free and will therefore exhibit positive convexity. An equal change in rates will produce a greater percentage gain when rates decrease than the percentage loss produced when rates increase.

54. Answer: C
Study Session 16-69-d
Compute and interpret the effective duration of a bond, given information about how the bond's price will increase and decrease for given changes in interest rates, and compute the approximate percentage price change for a bond, given the bond's effective duration and a specified change in yield
Effective duration = (100.9254-99.0861)/2 (100)(0.001)= 9.2 years

56. Answer: C
Study Session 15-63-f
Compute and interpret the duration and dollar duration of a bond
The dollar duration = 5.6 $\times$0.01 $\times$\$5,125,000 = \$287,000.

59. Answer: B
Study Session 12-49-c
Describe the return objectives of capital preservation, capital appreciation, current income, and total return
Total return is an appropriate strategy for an investor seeking to grow his portfolio with a balance between income and capital gains. Capital preservation is an appropriate strategy for strongly

risk-averse investors.