高顿网校·财经讲堂

2014年CFA一级习题精讲

高顿教育旗下品牌：高顿网校

1. During the past year, a company's production facility was operating at 75% of capacity. The firm's costs were as follows:

Fixed production overhead costs	3
Raw materials costs	6
Labor costs	4
Freight-in costs for raw materials	1
Warehousing costs for finished goods	2

The firm ended the year with no remaining work-in-process inventory. The total capitalized inventory cost (in $ millions) for the year is closest to:

A. 13.25.

B. 15.25.

C. 16.00.

Test Point

Los 29.a. distinguish between costs included in inventories and costs recognized as expenses in the period in which they are incurred;

Answer: A

	$ millions
Fixed Production Costs: 75% of capacity: 75% x $3	2.25
Raw materials	6
Labor Costs	4
Freight In	1
Total Capitalized Inventory Cost	**13.25**

2. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted. A company using the LIFO inventory method reports a LIFO reserve at year-end of $85,000, which is $20,000 lower than the prior year. If the company had used FIFO instead of LIFO in that year, the company's financial statements would have reported:

A. a lower cost of goods sold, but a higher inventory balance.

B. a higher cost of goods sold, but a lower inventory balance.

C. both a higher cost of goods sold and a higher inventory balance.

Test point:

Los 29.c. calculate cost of sales and ending inventory using different inventory valuation methods and explain the effect of the inventory valuation method choice on gross profit;

Answer: C

The negative change in the LIFO reserve would increase the cost of goods sold under FIFO compared to LIFO. FIFO COGS = LIFO COGS – Change in LIFO reserve. The LIFO reserve has a positive balance so that FIFO inventory would be higher than LIFO inventory. FIFO inventory = LIFO inventory + LIFO reserve.

3. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted. A company uses the LIFO inventory method, but most of the other companies in the same industry use FIFO. Which of the following best describes one of the adjustments that would be made to the company's financial statements to compare it with other companies in the industry? The amount reported for the company's ending inventory should be:

A. increased by the ending balance in its LIFO reserve.

B. decreased by the ending balance in its LIFO reserve.

C. increased by the change in its LIFO reserve for that period.

Test point:

Los 29.c. calculate cost of sales and ending inventory using different inventory valuation methods and explain the effect of the inventory valuation method choice on gross profit;

Answer: A

LIFO Reserve = FIFO Inventory – LIFO Inventory Adding the ending balance in the LIFO reserve to the LIFO inventory would equal the ending balance for inventory on a FIFO basis.

4. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted. The year-end balances in a company's LIFO reserve are $56.8 million in the company's financial statements for both 2007 and 2008. For 2008, the measure that will most likely be the same regardless of whether the company uses the LIFO or FIFO inventory method is the:

A. inventory turnover

B. gross profit margin.

C. amount of working capital

Test point:

Los 29.e. compare and contrast cost of sales, ending inventory, and gross profit using different inventory valuation methods;

Answer: B

The LIFO reserve did not change from 2007 to 2008. Without a change in the LIFO reserve, cost of goods sold would be the same under both methods. Sales are always the same for both; so gross profit margin would be the same in 2008. The FIFO inventory would be higher because the LIFO inventory and LIFO reserve are added to compute FIFO inventory. Because the inventory balances would be different under FIFO, inventory turnover, and net working capital would also be different under FIFO.

5. A retail company prepares its financial statements in accordance with U.S. GAAP (generally accepted accounting principles). Its purchases and sales of inventory for its first two years of operations are listed below.

	First Year	Second Year
Units Purchased	80,000	100,000
Unit Cost	$8.43	$12.25
Units Sold	73,000	78,000
Unit Selling Price	$15.00	$16.00

In its second year of operation, the company’s ending inventory is $348,003. Which of the following inventory cost flow assumptions is the company was most likely using?

A. FIFO

B. LIFO

C. Weighted average cost

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Test Point:

Los 29.e. compare and contrast cost of sales, ending inventory, and gross profit using different inventory valuation methods;

Answer: C

The company is accounting for its inventory using the weighted average cost method.

In the 2nd year of operations, under Weighted Average Cost:

Units available for sale include ending inventory from year 1 plus purchases for year 2:

7,000 + 100,000 = 107,000

Cost of Goods Available for Sale: 7,000 x $8.43 + 100,000 x $12.25 = $1,284,000

Unit Cost: $1,284,000/107,000 = $12.00

End Inventory = 107,000 –78,000 = 29,000 units. $12.00 x 19,000 = $348,003

6. Is the reversal of an inventory write-down permitted under U.S. GAAP (generally accepted accounting principles) and International Financial Reporting Standards (IFRS)?

A. No, under both

B. Yes, under both

C. Yes under IFRS but not under U.S. GAAP

Test Point:

Los 29.f. describe the measurement of inventory at the lower of cost and net realizable value;

Answer: C

The reversal of an inventory write-down is permitted under IFRS but not under U.S. GAAP.

7. A European based company follows IFRS (International Financial Reporting Standards) and capitalizes new product development costs. During 2008 they spent €25 million on new product development and reported an amortization expense related to a prior year's new product development of €10 million. Other information related to 2008 is as follows:

	€ millions
Net income	225
Cash flow from operations	290

An analyst would like to compare the European company to a similar U.S. based company and has decided to adjust their financial statements to U.S. GAAP. Under U.S. GAAP, and ignoring tax effects, the cash flow from operations (€ millions) for the company would be closest to:

A. 265.

B. 275.

C. 290.

Test Point:

Los 30.a. distinguish between costs that are capitalised and costs that are expensed in the period in which they are incurred;

Answer: A

If all development costs had been expensed then net income would be reduced by the amount spent, and increased by the amortization of the previously capitalized amounts: 225 – 25 + 10 = 210 million. CFO would be lower by the amount spent on development 290 – 25 = 265 million. Note: The amortization of previous development costs is a non-cash expense so does not affect cash flow.

8. Two software companies that report their financial statements under U.S. GAAP (generally accepted accounting principles) are identical except as to how soon they judge a project to be technologically feasible. One firm does so very early in the development cycle while the other usually waits until just before the project is released to manufacturing. Compared to the company that judges technological feasibility early, the one that waits until closer to manufacturing will most likely report lower:

A. financial leverage

B. total asset turnover

C. cash flow from operations

Test Point:

Los 30.a. distinguish between costs that are capitalized and costs that are expensed in the period in which they are incurred;

Answer: C

U.S. GAAP requires that a company expense costs related to software development until product feasibility is established and capitalize any costs thereafter. The company that capitalizes these software development costs reports the expenditures in the investing activities section of the statement of cash flows; the company that expenses software development costs reports the expenditures in the cash flow from operations.

9. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted. A company acquires some new depreciable assets. Which of the following combinations of estimated salvage value and useful life will most likely produce the highest net profit margin?

A. low salvage value estimates and long average lives.

B. high salvage value estimates and long average lives.

C. high salvage value estimates and short average lives.

Test Point:

Los 30.c. describe the different depreciation methods for property, plant, and equipment, the effect of the choice of depreciation method on the financial statements, and the effects of assumptions concerning useful life and residual value on depreciation expense;

Answer: B

A high salvage value estimate reduces the depreciable base and thus depreciation expense; long average lives reduce the annual depreciation expense for any given depreciable base. The combination of the two would result in the lowest depreciation expense which leads to the highest net income and profit margins.

10. A Mexican corporation is computing the depreciation expense of a piece of manufacturing equipment for the fiscal year ended December 31, 2010 using the information below. The company takes a full year's depreciation in the year of acquisition.

Date of purchase	January 1, 2010
Cost of equipment	MXN 2,000,000
Estimated residual value	MXN 200,000
Expected useful life	10 years
Total productive capacity	5,000,000 units
Production in 2010	800,000 units

The depreciation expense (in MXN) will most likely be:

A. 180,000 lower using the straight-line method compared with the double-declining balance method.

B. 140,000 higher using the units-of-production method compared with the straight-line method.

C. 112,000 higher using the double-declining method compared with the units-of-production method.

Test Point:

Los 30.d. calculate depreciation expense;

Answer = C

	Straight-line	Units of Production	Declining balance
Rate	10%	5,000,000 units	1/10 x 2 = 20%
Annual expense	(2,000,000 – 200,000)/10	(2,000,000 – 200,000) x (800,000/5,000,000)	0.20 x 2,000,000
	= 180,000	= 288,000	= 400,000
Difference between the declining balance and units of production is:			
= 400,000 – 288,000 = 112,000			

11. At the start of the year, a company acquired new equipment at a cost of €50,000, estimated to have a 3 year life and a residual value of €5,000. If the company depreciates the asset using the double declining balance method, the depreciation expense that the company will report for the third year is closest to:

A. €555

B. €3,328

C. €3,705

Test Point:

Los 30.d. calculate depreciation expense;

Answer = A

Under double declining balance method, the depreciation rate would be 2 x the straight line rate of 33.3%, i.e., 66.6%, or 2/3 depreciation rate per year. However, the asset should not be depreciated below its assumed residual value in any year.

Double Declining Method of Depreciation			
Year	**Net BV at Start of Year**	**Depreciation**	**Net BV at End of Year**
1	50,000	33,333	16,667
2	16,667	11,111	5,555
3	5,555 *	**555 ****	5,000
*	Alternative calculation for start of Year 3 Net Book Value:		
	50,000 x (1-0.667) x (1-0.667) = 5,555		
**	Depreciation cannot be 2/3 x 5,555 = 3,705 since that would reduce book value to below the estimated 5,000		

12. A company, which prepares its financial statements in accordance with IFRS uses the revaluation model to value land. At the end of the current year the land value of the land has increased and will be adjusted on the balance sheet. Which of the following statements is most accurate? In the current period the revaluation of the land will:

A. increase return on sales

B. increase return on assets

C. decrease the debt to equity ratio

Test Point:

Los 30.g. describe the revaluation model;

Answer = C

The increase in the value of the land bypasses the income statement and goes directly to a revaluation surplus account in equity. Equity increases thereby decreasing the debt to equity ratio.

13.Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted. A company has equipment with an original cost of $850,000, accumulated amortization of $300,000 and 5 years of estimated remaining useful life. Due to a change in market conditions the company now estimates that the equipment will only generate cash flows of $80,000 per year over its remaining useful life. The company's incremental borrowing rate is 8 percent. Which of the following statements concerning impairment and future return on assets (ROA) is most accurate? The asset is:

A. impaired and future ROA increases.

B. impaired and future ROA decreases.

C. not impaired and future ROA increases.

Test Point：

Los 30.h. explain the impairment of property, plant, and equipment, and intangible assets;

Answer: A

The equipment is impaired. NBV = $550,000 which is greater than the sum of the undiscounted cash flows 5 yrs x $80,000 = $400,000. The company's future ROA will increase. Once the asset is written down, there will be lower depreciation charges, which will increase net income, and a lower carrying value of assets, which decreases total assets. Both factors would increase any future ROA.

14. A company prepares its financial statements in accordance with U.S. GAAP (generally accepted accounting principles). It expected to be the sole supplier for a state-wide school milk program and had production facilities valued at $28.4 million. Recently several other companies were also granted milk-supply contracts throughout the state and the company now estimates that it will only be able to generate cash flows of $3 million per year for the next 7 years with its facilities. The firm has a cost of capital of 10%.The impairment loss (in $-millions) on the production facilities will most likely be reported in the company's financial statements as a:

A. 13.8 reduction in operating cash flows

B. 13.8 impairment loss in the income statement

C. 7.4 reduction in the balance sheet carrying amount

Test Point:

Los 30.h. explain the impairment of property, plant, and equipment, and intangible assets;

Answer: B

The company will report an impairment loss in the income statement: The facilities fail the recoverability test, the net book value cannot be recovered from undiscounted cash flows: 7 yrs x $3 = $21 < $28.4. Therefore, the asset is impaired. The asset should be written down to its fair value.

Fair Value: PV of future benefits: (N=7; i=10; PMT=3): PV = 14.6

Impairment Loss: Carrying Value – Fair Value: 28.4 - 14.6 = 13.8 to be reported on the income statement

15.Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted. Which of the following best describes taxes payable?

A. Total liability for current and future taxes.

B. Tax return liability resulting from current period taxable income.

C. Actual cash outflow for income taxes including payments (refunds) for other years.

Test Point:

Los 31.a. describe the differences between accounting profit and taxable income, and define key terms, including deferred tax assets, deferred tax liabilities, valuation allowance, taxes payable, and income tax expense;

Answer: B

Taxes payable is the current liability resulting from the current period taxable income based on the company's tax rate and the portion of its income that is subject to income taxes under the tax laws of the jurisdiction.

16. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted. A company records the following two transactions:

I. €300,000 of rental revenue is received in advance on a two-year lease. It is taxed on a cash basis, but deferred for accounting purposes.

II. €500,000 of installment sales. No payments are required for one year after which collections will be made on an equal basis over 12 months and taxed on a cash basis. The entire sale and related profit will be recognized for financial reporting purposes in the year of sale.

Which of the above transactions will most likely give rise to a deferred tax liability on the balance sheet?

A. I only.

B. II only.

C. Both I and II.

Test Point:

Los 31.b. explain how deferred tax liabilities and assets are created and the factors that determine how a company’s deferred tax liabilities and assets should be treated for the purposes of financial analysis;

Answer: B

II represents a deferred tax liability: The accounts receivable for financial statement purposes has a carrying value of €500,000 but with a tax base of €0. The temporary difference creates a deferred tax liability. Alternatively, accounting income tax expense exceeded taxes payable and the firm expects to eliminate this difference over the course of future operations. Item I represents a deferred tax asset: Rent received in advance creates a liability on the financial statements with a carrying value of €300,000 but with a tax base of €0. The temporary difference creates a deferred tax asset. Alternatively an excess amount has been paid for income taxes based on the cash received (taxable income exceeded accounting income) and the company expects to recover this difference during the course of future operations.

17. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted.The following information relates to a profitable company that offers a warranty on a new product introduced in 2008:

Accrued warranty expenses for the warranty in 2008	$300,000
Actual expenditures for repairs under the warranty in 2008	$200,000

If the company's tax rate is 35 percent, which of the following most accurately describes the deferred tax recorded in 2008 with respect to the new product warranty?

A. Deferred tax asset of $35,000.

B. Deferred tax asset of $65,000.

C. Deferred tax liability of $35,000.

Test Point:

Los 31.d. 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;

Answer: A

For financial statement purposes, the warranty expense recorded in 2008 is greater than the cash expense they incurred (and that is allowed as a deduction for income tax purposes), resulting in a warranty liability for financial statement purposes, but not for tax purposes. As the carrying amount of the liability is greater than the tax base, the $100,000 temporary difference will give rise to a $35,000 (100,000 x 0.35) deferred tax asset.

18. A company purchased a €2,000 million long-term asset in 2009 when the corporate tax rate was 30 percent.

Asset year end value for (All figures in € millions.)	2010	2009
Accounting purposes	1,800	1,900
Tax purposes	1,280	1,600

On January 15, 2010 the government lowered the corporate tax rate to 25 percent for 2010 and beyond. The deferred tax liability (€) as at 31 December 2010 is closest to:

A. 130.

B. 156.

C. 205.

Test Point:

Los 31.d. 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;

Answer: A

The deferred tax liability equals the difference between the value for accounting and the value for tax times the current tax rate in effect. (1,800 – 1,280) x 0.25 = 520 x 0.25 = 130

19. Under U.S. GAAP what is the most likely effect of the reversal of a valuation allowance related to a deferred tax asset on net income?

A. No effect

B. A decrease

C. An increase

Test Point:

Los 31.g. describe the valuation allowance for deferred tax assets—when it is required and what impact it has on financial statements;

Answer: C

The reversal of a valuation allowance increases the deferred tax assets and decreases the deferred tax expense, increasing net income.

20. A company issued $2,000,000 of bonds with a 20 year maturity at 96. Seven years later, the company called the bonds at 103 when the unamortized discount was $39,000. The company would most likely report a loss of:

A. $60,000

B. $99,000

C. $138,000

Test Point：

Los 32.a. determine the initial recognition, initial measurement, and subsequent measurement of bonds;

Answer = B

Redemption cost	\$2,060,000	(\$2,000,000 x 103/100)
Carrying amount retired	1,961,000	(\$2,000,000 – \$39,000)
Loss on redemption	\$99,000	

21. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted. At the beginning of the year, a company issues a $1,000 face value, semiannual coupon, bond with an 8 percent coupon rate maturing in 10 years. The annual market rate of interest at issuance was 12 percent. The initial liability recorded for this bond is closest to:

A. $771.

B. $774.

C. $1,000.

Test Point：

Los 32.b. describe the effective interest method and calculate interest expense, amortisation of bond discounts/premiums, and interest payments;

Answer: A

The liability recorded is based on market rates of interest when the bond is issued and not the coupon rate on the bond. The market value of the bond at issuance was $770.60. (FV=1,000, PMT=40, N=20, I=6.0).

22. A company issued a $50,000 7-year bond for $47,565. The bonds pay 9 percent per annum and the yield-to-maturity at issue was 10 percent. The company uses the effective interest rate method to amortize any discounts or premiums on bonds. After the first year, the yield to maturity on bonds equivalent in risk and maturity to these bonds is 9 percent. The amount of the bond discount amortization ($) recorded in the second year is closest to:

A. 282.

B. 348.

C. 2,178.

Test Point:

Los 32.b. describe the effective interest method and calculate interest expense, amortization of bond discounts/premiums, and interest payments;

Answer: A

Interest paid = Market rate at issue x Issued amount of bonds = 9% x $50,000

Interest expense = Market rate at issue x Carrying (BV) of bonds

Amortization of discount = Interest expense - Interest paid

Year	Interest Paid	Interest Expense	Amortization of Discount	Carrying Value
0				47,565
1	4,500	4,757	257	47,822
2	4,500	4,782	282	48,104

Amortization in the 2nd year is 282

23. Which of the following is most likely a benefit of debt covenants for the borrower?

A. Reduction in the cost of borrowing.

B. Limitations on the company’s ability to pay dividends.

C. Restrictions on how the borrowed money may be invested.

Test Point:

Los 32.d. explain the role of debt covenants in protecting creditors;

Answer: A

The reduction in the cost of borrowing is a benefit of covenants to the borrower.

24. Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted. On 1 January 2008 a company enters into a lease agreement to lease a piece of machinery as the lessor with the following terms:

Annual lease payment due 31 December	$75,000
Lease term	6 years
Estimated useful life of the machine	7 years
Estimated salvage value of the machine	$0
Carrying value (cost) of leased asset	$300,000
Implied interest rate on lease	7%

The firm is reasonably assured of the collection of the lease payments.

The total effect on 2008 pre-tax income for the lessor from this lease is closest to:

A. $32,143

B. $75,000

C. $82,519

Test Point:

Los 32.g. distinguish between a finance lease and an operating lease from the perspectives of the lessor and the lessee;

Answer: C

This is a sales type lease: the lease period covers more than 75% of its useful life (6/7=85.7%) and the asset is on its books at less than the present value of the lease payments ($357,490) (PMT = $75,000, N=6, i=7%). The firm must have acquired or manufactured the asset if it is recorded at less than the present value of the lease payments. The income in the first year will therefore consist of the gross profit on the sale (357,490-300,000)=57,490 plus interest revenue from financing the lease = 25,024(see below)

Year	Start Balance	Interest	Payment	End Balance
1	357,490	7%x357,490=25,024	75,000	357,490-(75,000-25,024)=307,514

Total income = 57,490 + 25,024 = 82,514

25. An analyst makes the appropriate adjustments to the financial statements of retail companies that are lessees using a substantial number of operating leases. Compared to ratios computed from the unadjusted statements, the ones computed from the adjusted statements would most likely be higher for:

A. the debt-equity ratio but not the interest coverage ratio

B. the interest coverage ratio but not the debt-equity ratio

C. both the debt-equity ratio and the interest coverage ratio

Test Point:

Los 32.g. distinguish between a finance lease and an operating lease from the perspectives of the lessor and the lessee;

Answer: A

The adjustments to convert operating leases into capital leases would increase the amount of total debt in the debt-equity ratio thus increasing the ratio; the portion of the lease payment estimated to be lease interest expense would lower the interest coverage ratio.

Financial Reporting and Analysis-B (26)

26. Which of the following is least likely to be a warning sign of low quality earnings?

A. Greater use of operating leases than peer companies.

B. Use of a higher discount rate in pension plan assumptions.

C. A ratio of operating cash flow to net income greater than 1.0.

Test Point:

Los 33.b. describe activities that will result in a low quality of earnings;

Answer = C

	Accounting Purposes	Tax Purposes
Revaluation surplus	(10,000 – 6,800) =3,200	no revaluation allowed
Depreciation, straight-line	20 years	5 years remaining
2009 start of year balance after revaluation	10,000	5,000
Depreciation 2009	500	1,000
Net balance end of 2009	9,500	4,000
Less revaluation surplus	(3,200)	______
Carrying value for purposes of deferred taxes	6,300	4,000

Deferred tax liability = 0.30 x (6,300 – 4,000) = **690**

Only the portion of the difference between the tax base and the carrying amount that is not the result of the revaluation is recognized as giving rise to a deferred tax liability. The portion arising from the revaluation surplus is used to reduce the revaluation surplus in equity.

27. Which of the following accounting warning signs was evident in the Enron accounting scandal?

A. Recording revenue from contingent sales.

B. Accelerating sales from later periods into the present quarter.

C. Classifying financing cash flows as operating cash flows to increase operating cash flows.

Financial Reporting and Analysis-B (27)

Test Point:

Los 33.d. describe common accounting warning signs and methods for detecting each.

Answer: C

Enron classified financing cash flows as operating cash flows.

28.Assume U.S. GAAP (generally accepted accounting principles) applies unless otherwise noted. Which of the following is the simplest way for a company to increase its reported operating cash flow?

A. Record sales on a bill-and-hold basis.

B. Slow down the rate of payment to suppliers.

C. Use a third party financial institution to pay suppliers.

Test Point:

Los 34.b.analyze and describe 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;

Answer: B

Slowing down the rate or payments to suppliers is the simplest way to increase reported operating cash flow.

29. Which of the following is the most useful to an analyst assessing the credit worthiness of a company? Information related to:

A. operating cash flow

B. the scale and diversity of a company’s operations

C. operational efficiency of the company’s operations

Test Point:

Los 35.c. describe the role of financial statement analysis in assessing the credit quality of a potential debt investment;

Answer: A

Credit analysis is concerned with a company's debt-paying ability. Returns to creditors are normally paid in cash, so the company's ability to generate cash internally is the most important factor in credit analysis.

30. When analyzing a company that prepares its financial statements according to U.S. GAAP, calculating the price/tangible book value ratio instead of the price/book value ratio is most appropriate if it:

A. grows primarily through acquisitions.

B. develops its patents and processes internally.

C. invests a substantial amount in new capital assets.

Test Point:

Los 35.e.explain appropriate analyst adjustments to a company's financial statements to facilitate comparison with another company.

Answer = A

A company that grows primarily through acquisition will have more goodwill and other intangible assets on its balance sheet than a company with fewer acquisitions or that has grown internally. To provide for comparisons with companies that do not follow such a growth strategy, an analyst would remove all intangibles and focus on tangible book value.