## True-False

1. Estimating the worth of a company, one of its operating units, or its ownership shares involves stock valuation.

2. Cash flow assessment plays a central role in analyzing the credit risk of a company.

3. Operating cash flow minus cash outlays to replace existing operating capacity is free cash flow.

4. The amount available to finance planned expansion of operating capacity, reduce debt, pay dividends, or repurchase stock is distributable cash flow.

5. In applying the discounted free cash flow valuation model, the discount rate used is the average cost of capital.

6. A simplified version of the discounted free cash flow valuation model assumes a zero-growth perpetuity for future cash flows. This assumption is best applied to growth companies with stable cash flow patterns.

7. FASB believes that the most useful predictor of future cash flows is future accrual accounting earnings.

8. Accrual accounting produces an earnings number that smoothes out the unevenness in year-to-year cash flows, and provides an estimate of sustainable annualized long-run future free cash flows.

9. The two most significant explanations for variations in the earnings multiple are risk differences and maturity of the firm.

10. A component that is valuation-relevant and expected to persist into the future is a permanent earnings component.

11. A component that is unrelated to future free cash flows or future earnings and is not pertinent to assessing current share price is a noise component.

12. Extraordinary gains and losses are regarded as value irrelevant earnings.

13. Earnings are considered high quality when they are reliable.

14. As transitory components become a more important part of a firm's reported earnings, the reported earnings are more quality enhanced.

15. Firms that earn less than the cost of equity capital produce negative abnormal earnings.

16. A firm has earnings above the cost of debt financing if the return on equity exceeds the return on assets.

17. An earnings surprise results from incorrect estimates of future earnings.

18. A term lending agreement has an original maturity of more than 1 year but less than 5 years.

19. A bond that has collateral to protect the bondholder is referred to as a debenture bond.

20. The written agreement between the borrowing company and its creditors is referred to as the indenture.

## Multiple-Choice Questions

Select the best answer from those provided.

21. The corporate valuation approach uses basic accounting measures to assess the amount, timing, and

a. certainty of a company's past operating cash flows or earnings.
b. certainty of a company's future non-operating cash flows or earnings.
c. uncertainty of a company's future operating cash flows or earnings.
d. uncertainty of a company's future non-operating cash flows or earnings.

22. The steps involved in corporate valuation are forecasting future values of some financial attribute that drives a company's value, determining the risk associated with that forecasted value, and determining the

a. future values of the value-relevant attribute.
b. certain future value of earnings.
c. present value of a company's earnings.
d. discounted present value of the expected future values of the value-relevant attribute.

23. According to the discounted free cash flow valuation model, the market value of common shares depends upon investors'

a. future expectations about the future economic prospects of free cash flows.
b. current expectations about the future economic prospects of free cash flows.
c. future expectations about the current economic prospects of free cash flows.
d. current expectations about the current economic prospects of free cash flows.

24. A simplified version of the discounted free cash flow valuation model assumes a zero-growth perpetuity for future cash flows. This assumption is best applied to

a. start-up companies with stable cash flow patterns.
b. growth companies with increasing cash flow patterns.
c. growth companies with stable cash flow patterns.
d. mature firms with stable cash flow patterns.

25. Recent research indicates that stock returns correlate better with
a. accrual earnings than realized operating cash flows.
b. cash basis earnings than realized operating cash flows.
c. realized operating cash flows than accrual earnings.
d. future operating cash flows than accrual earnings.

26. The reciprocal of the risk-adjusted equity cost of capital used is the
a. return on assets.
b. return on common equity.
c. price earnings ratio.
d. profit margin on sales.

27. If a company currently earns $5.00 per share, and has a risk-adjusted cost of equity capital of 9%, a share of common stock should theoretically sell for
a. $ 0.45.
b. $ 5.00.
c. $ 48.00.
d. $ 55.55.

28. If a company currently earns $6.00 per share, and has a risk-adjusted cost of equity capital of 12.5%, a share of common stock should theoretically sell for
a. $ 0.75.
b. $ 6.00.
c. $ 48.00.
d. $ 75.75.

29. If most firms' price/earnings ratios are between 10 and 15, what is the range of average risk-adjusted equity cost of capital?
a. 6.67% to 10%
b. 6.67% to 15%
c. 10% to 15%
d. 10% to 16.67%

30. Risky firms have a higher risk-adjusted cost of capital. Which one of the following factors would contribute to that firm also having a high price/earnings ratio?
a. High earnings per share
b. Low earnings per share
c. Growth opportunities
d. High risk and high P/E ratio cannot occur simultaneously.

31. To obtain a better current price, the net present value of future growth opportunities (NPVGO) can be calculated and
a. added to the price per share calculated from the P/E ratio.
b. subtracted from the price per share calculated from the P/E ratio.
c. multiplied by the price per share calculated from the P/E ratio.
d. divided into the price per share calculated from the P/E ratio.

32. The net present value of future growth opportunities will contribute to an above average P/E multiple when the retention ratio (k) is
a. positive and the return on new investment is lower than the cost of equity capital.
b. positive and the return on new investment is greater than the cost of equity capital.
c. negative and the return on new investment is lower than the cost of equity capital.
d. negative and the return on new investment is greater than the cost of equity capital.

33. A component that is valuation-relevant but is not expected to persist into the future is a
a. permanent earnings component.
b. transitory earnings component.
c. noise component.
d. quiet component.

34. Income from continuing operations, excluding special or nonrecurring items, is regarded as
a. permanent earnings.
b. transitory earnings.
c. value-irrelevant earnings.
d. quiet.

35. Income or loss from discontinued operations is regarded as
a. permanent earnings.
b. transitory earnings.
c. value-irrelevant earnings.
d. quiet.

36. A cumulative effect adjustment to income due to a change in accounting principles is regarded as
a. permanent earnings.
b. transitory earnings.

c. value-irrelevant earnings.
d. quiet.

Table 6-1

| | Firm A | Firm B | Firm C |
|---|---|---|---|
| Reported EPS | $12 | $15 | $18 |
| | | | |
| Analyst's EPS decomposition: | | | |
| Permanent component ($\beta P = 5$) | 80% | 60% | 75% |
| Transitory component ($\beta T = 1$) | 10% | 35% | 25% |
| Value-irrelevant component ($\beta 0 = 0$) | 10% | 5% | 0% |

37. Refer to Table 6-1. The implied share price of Firm A's stock is
a. $12.00.
b. $48.00.
c. $49.20.
d. $54.40.

38. Refer to Table 6-1. The implied share price of Firm B's stock is
a. $15.00.
b. $45.00.
c. $50.25.
d. $55.25.

39. Refer to Table 6-1. The implied share price of Firm C's stock is
a. $18.00.
b. $63.00.
c. $72.00.
d. $90.00.

40. Refer to Table 6-1. The implied total earnings multiple of Firm A is
a. 1.00.
b. 4.10.
c. 5.00.
d. 10.00.

41. Refer to Table 6-1. The implied total earnings multiple of Firm B is
a. 1.00.
b. 3.00.
c. 3.35.
d. 12.00.

42. Refer to Table 6-1. The implied total earnings multiple of Firm C is
a. 1.00.
b. 3.75.
c. 4.00.
d. 15.00.

43. Which one of the following is an example of sustainable earnings?
a. Loss from debt retirement
b. Expenditures for advertising
c. Earnings from repeat customers
d. Gain from corporate restructuring

44. As transitory components become a more important part of a firm's reported earnings, the reported earnings
a. become a more reliable indicator of sustainable cash flows.
b. are more quality enhanced.
c. are a more reliable indicator of fundamental value.
d. are a less reliable indicator of sustainable cash flows.

45. The assessment of earnings quality is best accomplished through the use of which one of the following?
a. Single-step financial statements
b. Balance sheet and cash flow statement
c. Multi-step income statement, balance sheet, and cash flow statement
d. Single-step income statement, balance sheet, and cash flow statement

46. According to the abnormal earnings approach of equity valuation, investors willingly pay a premium for those firms that
a. earn less than the cost of equity capital.
b. produce negative abnormal earnings.
c. produce positive abnormal earnings.
d. earn an amount equal to the equity cost of capital.

47. Firms that earn less than the cost of equity capital have a share price
a. above the market average.
b. equal to book value.
c. above book value.
d. below book value.

48. The price of equity at time 0 is equal to the
a. book value of equity at time 0.
b. expected abnormal earnings in all future periods.

c. book value of equity at time 0 plus expected abnormal earnings in all future periods divided by discount factors for all future periods.
d. book value of equity at time 0 minus expected abnormal earnings in all future periods divided by discount factors for all future periods.

49. What are the abnormal earnings of a firm that has NOPAT of $40,000 with an equity cost of capital of 10%, when the book value at the beginning of period is $800,000?
a. $ (40,000)
b. $ (80,000)
c. $ 40,000
d. $ 80,000

Table 6-2

| | Firm A | Firm B | Firm C |
|---|---|---|---|
| NOPAT | $6,000 | $14,000 | $18,000 |
| r | 10% | 8% | 12% |
| $BVt_{-1}$ | $100,000 | $150,000 | $190,000 |

50. Refer to Table 6-2. What are the abnormal earnings for Firm A?
a. $ (4,000)
b. $ (6,000)
c. $ 4,000
d. $ 6,000

51. Refer to Table 6-2. What are the abnormal earnings for Firm B?
a. $ 1,000
b. $ 2,000
c. $ 12,000
d. $ 14,000

52. Refer to Table 6-2. What are the abnormal earnings for Firm C?
a. $ (2,400)
b. $ (4,800)
c. $ 4,800
d. $ 9,600

53. Refer to Table 6-2. Assume that Firm A can increase NOPAT by $4,000, by cutting costs. Abnormal earnings would be
a. $ (1,000).
b. $ 0.
c. $ 1,000.
d. $ 1,500.

54. Refer to Table 6-2. Assume that Firm B can divest itself of $20,000 of unproductive capital with NOPAT falling by only $3,000. Abnormal earnings are
a. $200.
b. $400.
c. $600.
d. $800.

55. A company with a return on equity that consistently exceeds the industry average ROE will generally have shares that sell at a
a. market-to-book ratio equal to the industry average.
b. lower market-to-book ratio than the industry average.
c. higher market-to-book ratio than the industry average.
d. higher market price than its competitors.

56. Prior to the announcement of bad news earnings (a negative earnings surprise), stock returns exhibit
a. a negative drift downward.
b. no change in stock returns.
c. a negative drift downward followed by an immediate upward drift.
d. a positive drift upward.

57. The interest rate on a revolving loan will usually
a. be below prime interest.
b. be equal to prime interest.
c. remain fixed.
d. float.

58. Short-term notes sold directly to investors by large, highly rated companies are called
a. commercial paper.
b. secured notes.
c. bonds.
d. debentures.

59. A bond that is considered unsecured is referred to as a
a. debenture bond.
b. sinking fund bond.
c. senior bond.
d. callable bond.

60. A qualitative assessment of the business, its customers and suppliers, and management's character and capability is known as

a. covenants.
b. due diligence.
c. indenture.
d. debenture.

61. The degree to which cash needs can be satisfied during periods of fiscal stress is known as

a. credit availability.
b. credit worthiness.
c. working capital.
d. financial flexibility.

62. Operating cash flows are typically negative for

a. established growth companies.
b. emerging companies.
c. mature companies.
d. blue-chip companies.

## Essay and Computational Questions

63. P/E ratios are a useful indicator and tool when performing valuation and comparing firms. List three factors that should be considered or adjusted for when comparing P/E ratios among different firms.

64. Earnings Surprises:

a. Define "Earnings Surprise"

b. One measure for expected earnings this quarter (t) could be earnings for the same quarter last year (t-4). List some of the disadvantages to using this measure.

c. Suggest a better measure for expected earnings.

65. A useful first step in valuation or forecasting is to identify the different components of earnings. Below is the Income Statement for the fiscal year 2004 for Temporaire, Inc. Answer the following questions:

a. Assuming the company faces a 30% tax rate:

What portion (in $) of the earnings number would you consider "permanent"?

- What portion (in $) of the earnings number would you consider "transitory"?
- What portion (in $) of the earnings number would you consider "valuation-irrelevant"?

b. Explain your calculations.

| | | |
|---|---|---|
| Income statement for the year 2004Sales | | 14,859 |
| Cost of good sold | (9,847) | |
| Gross profit | 5,012 | |
| SG&A | (2,549) | |
| Operating income | 2,463 | |
| Gain on sale of fixed assets | 76 | |
| Income before interest and taxes | 2,539 | |
| Interest expense | (153) | |
| Income before special items and taxes | 2,386 | |
| Gain on early retirement of long term debt | 53 | |
| Restructuring charges | (85) | |
| Pretax income | 2,354 | |
| Income tax | (702) | |
| Net income from continuing operations | 1,652 | |
| Loss from discontinued operations (net of tax) | (97) | |
| Loss from plant confiscated in Venezuela (net of tax) | (84) | |
| Cumulative effect of change in depreciation method for fixed assets (net of tax) | (16) | |
| | 1,455 | |

## Answers

1. E;False
2. E;True
3. E;True
4. E;True
5. M;False
6. M;False
7. M;False
8. M;True
9. M;False
10. E;True
11. E;True
12. M;False
13. M;False
14. M;False
15. M;True
16. M;True

17. M;True
18. M;True
19. M;False
20. M;True
21. E;(c)
22. M;(d)
23. M;(b)
24. M;(d)
25. M;(a)
26. M;(c)
27. M;(d)
28. M;(c)
29. D;(a)
30. M;(c)
31. M;(a)
32. D;(b)
33. E;(b)
34. M;(a)
35. M;(b)
36. M;(c)
37. M;(c)
38. M;(c)
39. M;(c)
40. M;(b)
41. M;(c)
42. M;(c)
43. M;(c)
44. M;(d)
45. M;(c)
46. M;(c)
47. M;(d)
48. M;(c)
49. M;(a)
50. M;(a)
51. M;(b)
52. M;(b)
53. M;(b)
54. M;(c)
55. M;(c)
56. M;(a)
57. M;(d)
58. M;(a)
59. M;(a)
60. M;(b)
61. M;(d)
62. M;(b)

## Explanation to Selected Multiple-Choice Questions

27. EPS \$5.00/cost of equity capital 9% = \$55.55

28. EPS \$6.00/cost of equity capital 12.5% = \$48.00

29. P/E = 1/*r* 10 =1/*r* *r* = 1/10 *r* = 10%, 15 = 1/*r* *r* = 1/15 *r* = 6.67%

37. .80 × \$12 = \$9.60 × 5 =\$ 48.00
    .10 × \$12 = \$1.20 × 1 =\$ 1.20
    .10 × \$12 = \$1.20 × 0 =\$ 0.00
    Implied share price \$ 49.20

38. .60 × \$15 = \$9.00 × 5 =\$ 45.00
    .35 × \$15 = \$5.25 × 1 =\$ 5.25
    .05 × \$15 = \$0.75 × 0 =\$ 0.00
    Implied share price \$ 50.25

39. .75 × \$18 = \$13.50 × 5 =\$ 67.50
    .25 × \$18 = \$ 4.50 × 1 =\$ 4.50
    .00 × \$18 = \$ 0.00 × 0 =\$ 0.00
    Implied share price \$ 72.00

40. Implied share price \$49.20/EPS \$12.00 = 4.1

41. Implied share price \$50.25/EPS \$15.00 = 3.35

42. Implied share price \$72.00/EPS \$18.00 = 4.0

49. Abnormal earnings =
    NOPAT \$40,000 – (r.10 × book value \$800,000) = – \$40,000

50. Abnormal earnings = NOPAT \$6,000 – (r.10 × book value \$100,000) = – \$4,000

51. Abnormal earnings = NOPAT \$14,000 – (r.08 × book value \$150,000) = \$2,000

52. Abnormal earnings = NOPAT \$18,000 – (r.12 × book value \$190,000) = – \$4,800

53. Abnormal earnings = NOPAT (\$6,000 + \$4,000) – (r.10 × book value \$100,000) = \$0

54. Abnormal earnings = NOPAT (\$14,000 – 3,000) – [(r.08 × book value \$150,000 – \$20,000)]

= \$600

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63. Suggested Answer: Risk differences, Growth opportunities, Earnings components (valuation irrelevant, permanent, and transitory).

64 Suggested Answer:

a. Difference between the estimated (or expected) earnings numbers and the actual reported (or announced) earnings.

b. Some disadvantages: does not take into account non-recurring items that were included in previous corresponding period earnings. Does not take into account new information and events that occurred after the previous corresponding period.

c. Adjust previous corresponding period earnings to reflect transitory items plus new information that became available in the interim. Consider using analyst forecasts.

65 Suggested Answer:

| | |
|---|---|
| PermanentIncome before special items and taxes (net of tax) | 1,670 |
| Transitory*Gain on early retirement of long term debt (net of tax) | 37 |
| Restructuring charges (net of tax) | (60) |
| Loss from discontinued operations (net of tax) | (97) |
| Loss from plant confiscated in Venezuela (net of tax) | (84) |
| Total (203) | |
| Valuation irrelevantCumulative effect of change in depreciation method for fixed assets (net of tax) | (16) |

* Inclusion in the "Transitory" category is not clear cut and depends on the assumptions made about the nature and history of the company.