Finance 300 Exam #1 Spring 1999

Multiple choice - 4 points each - 72 total points – PUT ALL ANSWERS ON ANSWER PAGE

1. All of the following are advantages of a corporation except:

   a. Easier access to raising capital
   b. Limited liability
   c. Double taxation
   d. All are advantages for a corporation

2. IBM has decided that they wish to issue stock to fund a new project. When the stock is issued it will be sold on the:

   a. NYSE
   b. NASDAQ
   c. primary market
   d. secondary market

3. Cash flows in different periods should not be compared unless:

   a. interest rates are expected to remain stable
   b. the cash flows occur no more than one year from each other
   c. high rates of interest can be earned on the cash flows
   d. the cash flows have been discounted to a common date

4. Suppose your father has just retired and has a retirement nest egg currently worth $1,000,000. If he plans to take out $101,853 at the end of each of the next 20 years beginning one year from today so that his nest egg is worth nothing after making the 20th withdrawal, what interest rate must his nest egg earn?

   a. 8%
   b. 10%
   c. 12%
   d. 14%
   e. 16%

5. Which of the following appears to be the most appropriate goal for corporate management?

   a. Maximizing market value of the company's shares.
   b. Maximizing the company's market share.
   c. Maximizing the current profits of the company.
   d. Minimizing the company's liabilities.

6. You need to accumulate $25,000 in 10 years. How much will you have to invest right now if your rate of return is 6% compounded semi-annually?

a. $11,409.79
b. $11,579.97
c. $13,841.98
d. $13,960.24

7. All other factors held constant, present value _______ as the number of discounting periods per year increases, and an increase in the number of compounding periods per year ________ the future value.

a. increases, increases
b. increases, decreases
c. decreases, increases
d. decreases, decreases

8. What is the present value of a perpetuity which will pay $1,000 per year beginning one year from now if the appropriate interest rate is 7%?

a. $11,111
b. $12,500
c. $14,286
d. $16,667

9. You need to accumulate $10,000. To do so, you plan to make deposits of $1,500 per year, with the first payment being made one year from now. The investment earns 8% compounded annually. Your last deposit will be less than $1,500 if less is needed to round out to $10,000. How large will your last deposit be?

a. $ 496
b. $ 770
c. $1,200
d. $1,374

10. Firms A and B have debt/total asset ratios of 75% and 50% and returns on total assets of 10% and 15% respectively. Which firm has the <u>greatest</u> return on equity?

a. Firm A
b. Firm B
c. they are both the same
d. not enough information available to tell

11. 15 years ago you purchased a stock for $20. The current price for the stock is $72.85. Assuming no dividends, what growth rate did the stock experience?

a. 9%
b. 10%
c. 11%
d. 12%

12. Which of the following statements about the current ratio is accurate?

a. Use of book values in calculation of this ratio is unacceptable because the market values of these assets and liabilities tend to deviate from book values
b. This ratio is computed by dividing current liabilities by current assets
c. This ratio is intended to indicate the long run liquidity position of the firm
d. It will always be greater than the quick ratio in companies that carry inventory
e. The higher the current ratio, the higher the level of cash in a firm

13. Which of the following is an agency cost?

a. Cost of interest payments to bondholders
b. Cost of wages for managers
c. Cost of dividend payments to bondholders
d. Cost of an internal audit required by bondholders

14. If a firm's total debt ratio is greater than .5, then:

a. Its current liabilities are high
b. Its debt-equity ratio is greater than 1.0
c. It has low total assets
d. It has too much debt

15. A firm has a profit margin of 15 percent on sales of $20,000,000. If the firm has debt of $7,500,000, total assets of $22,500,000, and an after-tax interest cost on total debt of 5 percent, what is the firm's ROA?

a. 9.2 %
b. 10.9 %
c. 12.0 %
d. 13.3 %
e. 15.1 %

Use the following information for questions 16 and 17
Timmons Co. has had sales this year of $1,000,000. Their selling and administrative expense was $220,000, COGS was $425,000, Interest Expense of $20,000, outstanding debt was $150,000 and depreciation was $75,000. Timmons has a 40% corporate tax rate.

16. What is Timmons Net Income for the year?

  a. $ 156,000
  b. $ 168,000
  c. $ 575,000
  d. $1,000,000

17. What is Timmons Operating Cash Flow for the year?

  a. $231,000
  b. $243,000
  c. $251,000
  d. $263,000

18. You are to receive $10,000 per year for the next 47 years. If the appropriate discount rate is 10%, what is the present value of this set of cash flows?

  a. $78,157.53
  b. $82,928.22
  c. $92,457.32
  d. $98,866.18

Partial Credit Problems - 28 points total - show all work

(10 points) The Thomas Construction Company has projected next year's sales to be $6,000,000. Construct a pro forma balance sheet given the following information. COGS are 50% of sales and credit sales are 60% of total sales.

Current Ratio	1.5
Debt Ratio	60%
Inventory Turnover	6
Accts. Rec. Period	60 days
Fixed Asset Turnover	2
Times Interest Earned	8.0
Profit Margin	.27
Return on Assets	30%

Pro Forma Balance Sheet

(10 points) You have decided to start saving for your retirement. You feel starting at the end of this year you will be able to save \$2,000 a year for 10 years and \$5,000 a year for the next 15 years after that. When you have finished with this period you will still have 10 years left until you retire. Before you retire you feel that you will earn 10% interest per year. After you retire you will become more conservative and will only earn 7%. If you want to withdraw from your account for 25 years, how much will you be able to withdraw each year so nothing is left at the end?

(8 points) Construct a loan amortization loan for a four year loan of $100,000 with an interest rate of 8% and equal payments each year.

ANSWER KEY EXAM #1 Spring 1999

1. C
2. C
3. D
4. A
5. A
6. C
7. C
8. C
9. A
10. A
11. A
12. D
13. D
14. B
15. D
16. A
17. C
18. D

Problem #1

Cash	$1,300,000	Current Liabilities	$ 1,600,000
Accounts Receivable	600,000		
Inventory	500,000	Long Term Debt	1,640,000
Total Curr. Assets	2,400,000		
Fixed Assets	3,000,000	Total Debt	3,240,000
		Equity	2,160,000
Total Assets	$ 5,400,000	Total Debt & Equity	$ 5,400,000

EBIT = $375,000
Net Income = $1,620,000

Problem #2
$64,990.30

Problem #3

Beginning Balance	Payment	Interest	Principal Payment	Ending Balance
100,000.00	30,192.24	8,000.00	22,192.24	77,807.76
77,807.76	30,192.24	6,224.62	23,967.62	53,840.14
53,840.14	30,192.24	4,307.21	25,885.03	27,955.11
27,955.11	30,192.24	2,236.41	27,955.83	0.00