TEST BANK
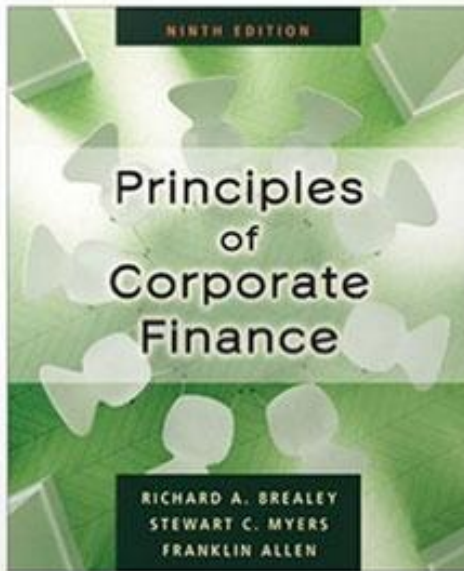
Chapter 02

Present Values, the Objectives of the Firm, and Corporate Governance

Multiple Choice Questions

1. *(p. 13)* The following are examples of real assets: I) Machinery; II) Office buildings; III) Warehouse; IV) Common stock
A. I, II, and III only
b. I and II only
c. IV only
d. I only

Type: Easy

2. *(p. 13)* The following are examples of tangible assets except: I) Machinery; II) Office buildings; III) Warehouse; IV) Training for employees
a. I only
b. I and II only
C. IV only
d. I, II, and III only

Type: Easy

3. *(p. 13)* The following are examples of intangible assets except: I) Trade marks; II) patents; III) Training for employees; IV) Office buildings
a. I only
b. II only
c. I, II, and III only
D. IV only

Type: Easy

4. *(p. 15)* The rate of return is also called: I) discount rate; II) hurdle rate; III) opportunity cost of capital
a. I only
b. I and II only
C. I,II, and III
d. None of the given ones

Type: Easy

5. *(p. 15)* Present value of $121,000 expected to be received one year from today at an interest rate (discount rate) of 10% per year is:
a. $121,000
b. $100,000
C. $110,000
d. None of the above

$PV = (121,000) / (1.1) = 110,000$

Type: Easy

6. *(p. 15)* One year discount factor at a discount rate of 25% per year is:
a. 1.25
b. 1.0
C. 0.8
d. None of the above

Discount Factor $= 1/1.25 = 0.8$

Type: Easy

7. *(p. 16)* The one-year discount factor at an interest rate of 100% per year is:
a. 1.5
B. 0.5
c. 0.25
d. None of the above

Discount factor = $1/(1 + 1) = 0.5$

Type: Easy

8. *(p. 15)* Present Value of $100,000 that is, expected, to be received at the end of one year at a discount rate of 25% per year is:
A. $80,000
b. $125,000
c. $100,000
d. None of the above

$PV = (100,000)/(1 + 0.25) = 80,000$

Type: Easy

9. *(p. 15)* If the one-year discount factor is 0.8333, what is the discount rate (interest rate) per year?
a. 10%
B. 20%
c. 30%
d. None of the above

$1 + r = 1/(0.8333) = 1.20; r = 20\%$

Type: Medium

10. *(p. 15)* If the present value of $480 to be paid at the end of one year is $400, what is the one-year discount factor?
A. 0.8333
b. 1.20
c. 0.20
d. None of the above

Discount factor is = 400/480 = 0.8333

Type: Medium

11. *(p. 15)* If the present value of $250 expected to be received one year from today is $200, what is the discount rate?
a. 10%
b. 20%
C. 25%
d. None of the above

$1 + r = 250/200 = 1.25; r = 25\%$

Type: Medium

12. *(p. 15)* If the one-year discount factor is 0.90, what is the present value of $120 to be received one year from today?
a. $100
b. $96
C. $108
d. None of the above

$PV = (120)(0.90) = 108$

Type: Medium

13. *(p. 15)* If the present value of $600 expected to be received one year from today is $400, what is the one-year discount rate?
a. 15%
b. 20%
c. 25%
D. 50%

$1 + r = (600)/(400) = 1.5; r = 50\,\%$

Type: Medium

14. *(p. 15)* The present value formula for one period cash flow is:
a. $PV = C_1(1 + r)$
B. $PV = C_1/(1 + r)$
c. $PV = C_1/r$
d. None of the above

Type: Medium

15. *(p. 16)* The net present value formula for one period is: I) $NPV = C_0 + [C_1/(1 + r)]$; II) $NPV = PV - $ required investment; and III) $NPV = C_0/C_1$
a. I only
B. I and II only
c. III only
d. None of the above

Type: Medium

16. *(p. 16)* An initial investment of $400,000 will produce an end of year cash flow of $480,000. What is the NPV of the project at a discount rate of 20%?
a. $176,000
b. $80,000
C. $0 (zero)
d. None of the above

NPV= -400,000 + (480,000/1.2) = 0

Type: Medium

17. *(p. 16)* If the present value of a cash flow generated by an initial investment of $200,000 is $250,000, what is the NPV of the project?
a. $250,000
B. $50,000
c. $200,000
d. None of the above

NPV= -200,000 + 250,000 = 50,000

Type: Easy

18. *(p. 16)* Which of the following statements about risk are (is) true:
a. A safe dollar is worth the same as a risky one
b. A safe dollar is worth less than a risky one
C. A safe dollar is worth more than a risky one
d. None of the above statements are true

Type: Medium

19. *(p. 17)* The following statements regarding the NPV rule and the rate of return rule are true except:
a. Accept a project if its NPV > 0
b. Reject a project if the NPV < 0
C. Accept a project if its rate of return > 0
d. Accept a project if its rate of return > opportunity cost of capital

Type: Difficult

20. *(p. 17)* An initial investment of $500 produces a cash flow $550 one year from today. Calculate the rate of return on the project
A. 10%
b. 15%
c. 25%
d. None of the above

Rate of return = (550 - 500)/500 = 10%

Type: Easy

21. *(p. 17)* According to the net present value rule, an investment in a project should be made if the:
a. Net present value is greater than the cost of investment
b. Net present value is greater than the present value of cash flows
C. Net present value is positive
d. Net present value is negative

Type: Difficult

22. *(p. 17)* Which of the following statements regarding the net present value rule and the rate of return rule is not true?
A. Accept a project if NPV > cost of investment
b. Accept a project if NPV is positive
c. Accept a project if return on investment exceeds the rate of return on an equivalent investment in the financial market
d. Reject a project if NPV is negative

Type: Difficult

23. *(p. 18)* The payoffs of an investment are dependent on the state of the economy. The economy can have two states, recession or growth, with equal probability. If the payoff in the event of growth is $140 and in the event of recession is $60, what is the expected payoff for the investment?
A. $100
b. $110
c. $120
d. None of the above

Expected payoff = 0.5*140 + 0.5*60 = 100

Type: Medium

24. *(p. 18)* If the probability of a recession is 0.2, normal growth is 0.5 and a boom is 0.3, and the payoff in the event of a recession is $100, normal growth is $400 and boom is $500, what is the expected payoff?
a. $200
B. $330
c. $400
d. None of the above

Expected payoff = 100*0.2 + 400*0.4 + 500*0.3 = 330

Type: Medium

25. *(p. 18)* Current price of Company X's stock is $90. The table below gives the data on end of the year prices and probabilities dependent on the state of the economy. Calculate the expected return for the stock.

Economy	Probability	End of the year price
Growth	.5	$130
Recession	.5	$ 90

a. 10%
b. 15%
C. 22.2%
d. None of the above

Expected Price = 0.5*130 + 0.5*90 = 110; Expected return = (110 - 90)/90 = 22.2%

Type: Medium

26. *(p. 18)* The opportunity cost of capital for a risky project is
a. The expected rate of return on a government security having the same maturity as the project
b. The expected rate of return on a well-diversified portfolio of common stocks
C. The expected rate of return on a portfolio of securities of similar risks as the project
d. None of the above

Type: Difficult

27. *(p. 21)* Mr. Free has $100 dollars income this year and zero income next year. The market interest rate is 10% per year. If Mr. Free consumes $30 this year, and invests the rest in the market, what will be his consumption next year?
a. $50
b. $100
C. $77
d. $55

Consumption next year = (100 - 30)*(1.1) = 77 (See Figure-1)

Type: Medium

28. *(p. 22)* Mr. Bird has $100 income this year and zero income next year. The market interest rate is 10% per year. Mr. Bird also has an investment opportunity in which he can invest $50 today and receive $80 next year. Suppose Mr. Bird consumes $30 this year and invests in the project. What will be his consumption next year?
a. $88
B. $102
c. $80
d. $100

Consumption next year = (100 - 30 - 50)*1.1 + 80 = 102

Type: Difficult

29. *(p. 22)* Ms. Venus has $100 income this year and $110 next year. The market interest rate is 10% per year. Suppose Ms. Venus consumes $60 this year. What will be her consumption next year?
A. $154
b. $170
c. $120
d. None of the above

Consumption next year = (100 - 60)*1.1 + 110 = 154

Type: Difficult

30. *(p. 22)* Mr. Thomas has $100 income this year and zero income next year. The market interest rate is 10% per year. Mr. Thomas also has an investment opportunity in which he can invest $50 this year and receive $80 next year. Suppose Mr. Thomas consumes $50 this year and invests in the project. What will be his consumption next year?
a. $55
B. $80
c. $50
d. None of the above

Mr. Thomas' investment this year = 100 - 50 = 50. His income next year by taking the investment opportunity is equal to 80

Type: Medium

31. *(p. 22)* Mr. Dell has $100 income this year and zero income next year. The market interest rate is 10% per year. Mr. Dell also has an investment opportunity in which he can invest $50 this year and receive $80 next year. Suppose Mr. Dell consumes $50 this year and invests in the project. What is the NPV of the investment opportunity?
a. $5
B. $22.73
c. $0 (zero)
d. None of the above

NPV = (80/1.1) - 50 = +22.73

Type: Difficult

32. *(p. 22)* Ms. Anderson has $60,000 income this year and $40,000 next year. The market interest rate is 10% per year. Suppose Ms. Anderson consumes $80,000 this year. What will be her consumption next year?
a. $60,000
b. $30,000
c. $70,000
D. $18,000

Borrow $20,000 this year to consume 60,000 + 20,000 = 80,000 Consumption next year = 40,000 - (20,000*1.1) = 18,000

Type: Difficult

33. *(p. 22)* The line that connects the maximum that one can consume this year (now) and the maximum one can consume next year:
a. Has a slope of $(1 + r)$
B. Has a slope of $-(1 + r)$
c. Has a slope of r
d. Has a slope of $1/r$

Type: Difficult

34. *(p. 22)* Ms. Newcastle has $60,000 income this year and $40,000 next year. The market interest rate is 10% per year. Suppose Ms. Newcastle wishes to consume $62,000 next year. What will be her consumption this year?
a. $60,000
B. $40,000
c. $70,000
d. $19,000

Consumption this year = 60,000 - (22,000/1.1) = 40,000

Type: Difficult

35. *(p. 22)* Mr. Smith has an income of $40,000 this year and $60,000 next year. He can invest in a project that costs $30,000 this year, which generates an income of $36,000 next year. The market interest rate is 10%. What will be his consumption next year, if Mr. Smith invests in the project and consumes $50,000 this year?
a. $40,000
B. $52,000
c. $60,000
d. None of the above

Consumption next year = [40,000 - 30,000 - 50,000]*1.1 + (60,000 + 36,000) = 52,000

Type: Difficult

36. *(p. 22)* The discount rate is used for calculating the NPV is:
A. Determined by the financial markets
b. Found by the government
c. Found by the CEO
d. None of the above

Type: Easy

37. *(p. 23)* The managers of a firm can maximize stockholder wealth by:
A. Taking all projects with positive NPVs
b. Taking all projects with NPVs greater than the cost of investment
c. Taking all projects with NPVs greater than present value of cash flow
d. All of the above

Type: Medium

38. *(p. 23)* The financial goal of a corporation is to:
a. Minimize stockholder wealth
b. Maximize profit
C. Maximize value of the corporation to the stockholders
d. Decrease job security

Type: Easy

39. *(p. 24)* Managers' actions are monitored by:
a. The board of directors
b. Commercial banks that have loaned funds to the firm
c. The Wall Street analysts
D. All of the above

Type: Medium

40. *(p. 25)* The following are some of the actions shareholders can take if the corporation is not performing well:
a. Replace the board of directors in an election
b. Force the board of directors to change the management team
c. Sell their shares of stock in the corporation
D. Any of the above

Type: Medium

41. *(p. 26)* The idea of "maximizing shareholder value" is widely accepted in: I) U.S.A.; II) U.K;
III) Germany; IV) France; V) Japan
a. I only
B. I and II only
c. III, IV and V only
d. I, II, III, IV and V

Type: Medium

42. *(p. 26)* The idea that "firms should be run for stakeholders welfare " is accepted in: I) U.S.A.;
II) U.K; III) Germany; IV) France; V) Japan
a. I only
b. I and II only
C. III, IV and V only
d. I, II, III, IV and V

Type: Medium

43. *(p. 26)* The Sarbanes-Oxley Act of 2002 (SOX) was passed largely in response to:
A. The corporate accounting scandals of the previous years
b. The increase in the budget deficits
c. The increase in the trade deficits
d. None of the above

Type: Medium

44. *(p. 26)* A major advantage of the Sarbanes-Oxley Act of 2002 (SOX) is:
A. Good investor protection
b. Increase in compliance costs
c. That it constrains managers' ability to run the firm
d. That it may discourage development of human capital in the firm

Type: Difficult

45. *(p. 26)* Major disadvantages of the Sarbanes-Oxley Act of 2002 (SOX) are the following except:
A. Good investor protection
b. Increase in compliance costs
c. That it constrains managers' ability to run the firm
d. That it may discourage development of human capital in the firm

Type: Difficult

True / False Questions

46. *(p. 15)* The rate of return, discount rate, hurdle rate or opportunity cost of capital all means the same.
TRUE

Type: Medium

47. *(p. 15)* A dollar today is worth more than a dollar tomorrow if the interest rate is positive.
TRUE

Type: Easy

48. *(p. 15)* The present value of a future cash flow can be found by dividing it by an appropriate discount factor.
FALSE

Type: Medium

49. *(p. 16)* Net present value is found by subtracting the required investment from the present value of future cash flows.
TRUE

Type: Medium

50. *(p. 16)* The opportunity cost of capital is higher for safe investments than for risky ones.
FALSE

Type: Medium

51. *(p. 16)* A safe dollar is always worth less than a risky dollar because the rate of return on a safe investment is generally low and the rate of return on a risky investment is generally high.
FALSE

Type: Difficult

52. *(p. 17)* "Accept investments that have positive net present values" is called the net present value rule.
TRUE

Type: Medium

53. *(p. 17)* "Accept investments that offer rates of return in excess of opportunity cost of capital"
TRUE

Type: Medium

54. *(p. 22)* The financial goal of a corporation should be to maximize profits.

FALSE

Type: Medium

55. *(p. 23)* Generally, in countries where the financial markets are not well-functioning; there are more family-owned and state-owned firms.
TRUE

Type: Medium

56. *(p. 26)* The Sarbanes-Oxley Act was passed in the year 2002.

<u>TRUE</u>

Type: Medium

Short Answer Questions

57. *(p. 15)* Briefly explain the term "discount rate."

Discount rate is the rate of return used for discounting future cash flows to obtain the present value. The discount rate can be obtained by looking at the rate of return, an equivalent investment opportunity in the capital market.

Type: Difficult

58. *(p. 15)* Intuitively explain the concept of the present value.

If you have $100 today, you can invest it and start earning interest on it. On the other hand, if you have to make a payment of $100 one year from today, you do not need to invest $100 today but a lesser amount. The lesser amount invested today plus the interest earned on it should add up to $100. The present value of $100 one year from today at an interest rate of 10% is $90.91. [PV = 100/1.1 = 90.91]

Type: Difficult

59. *(p. 17)* State the "net present value rule."

Invest in projects with positive net present values. Net present value is the difference between the present value of future cash flows from the project and the initial investment.

Type: Medium

60. *(p. 17)* Briefly explain the concept of risk.

If the future cash flows from an investment are not certain then we call it a risky cash flow. That means there is an uncertainty about the future cash flows or future cash flows could be different from expected cash flows. The degree of uncertainty varies from investment to investment. Generally, uncertain cash flows are discounted using a higher discount rate than certain cash flows. This is only one method of dealing with risk. There are many ways to take risk into consideration while making financial decisions.

Type: Difficult

61. *(p. 17)* State the "rate of return rule."

Invest as long as the rate of return on the investment exceeds the rate of return on equivalent investments in the capital market.

Type: Medium

62. *(p. 20)* Briefly explain how individuals can adjust their preferences for current and future consumption

Individuals can adjust their preferences for consumption by borrowing or lending in the financial market. The appropriate balance between present and future consumption that each individual will choose depends on personal preferences. But individuals with different preferences can adjust their preferences using financial market.

Type: Difficult

63. *(p. 22)* Explain why "maximization of shareholders' wealth" is the appropriate goal of the firm.

Under perfect market conditions, everyone can borrow or lend at the same interest rate. This implies that differences in consumption patterns can be adjusted in the capital markets. Given this, all investors will agree that they are better off if the firm maximizes their current wealth, i.e. maximizing shareholders' wealth.

Type: Difficult

64. *(p. 23)* Briefly explain how the concept of net present value allows for efficient separation of ownership and management.

A manager who invests in projects with positive net present value serves the best interests of each and every shareholder by increasing the value of the firm. This is true regardless of individual preferences of shareholders. For example, there is no need for mangers to follow a specific investment policy to match the time preferences of shareholders' consumption. Shareholders can always use the financial market for that. Thus there is an efficient separation of ownership and management. It is important to note that the net present values are meaningful only in the presence of a well-functioning financial market.

Type: Difficult

65. *(p. 23)* Briefly explain how a financial manager's task is simplified by the presence of a well functioning financial market.

In the presence a well-functioning financial market, shareholders can adjust their preferences by borrowing and lending. Shareholders prefer more consumption to less. Therefore managers need not worry about shareholders' preferences but concentrate on increasing the market value of the firm by taking all projects with positive net present value.

Type: Difficult

66. *(p. 24)* Briefly explain some of the institutional arrangements that ensure that managers work toward increasing the value of a firm.

· The board of directors who are elected by the shareholders scrutinizes managers' actions.
· Competition among managers
· The threat of takeover that brings a new management team.
· Incentive schemes that are closely tied to the value of the firm like stock options

Type: Medium

67. *(p. 26)* Briefly explain different views taken in different countries about the corporation's goals.

The idea of maximizing the shareholder value as the goal of a corporation is widely accepted in the U.S.A. and the U.K. In Germany, France and Japan the idea that the corporation is responsible for all the stakeholders is prevalent.

Type: Medium

68. *(p. 26)* Briefly explain the reasons for enacting the Sarbanes-Oxley Act of 2002.

The corporate accounting scandals involving the bankruptcy of Enron and Worldcom corporations led to the enactment of Sarbanes-Oxley Act of 2002.

Type: Medium

69. *(p. 26)* Briefly explain the advantages and disadvantages of Sarbanes-Oxley Act of 2002 (SOX).

The main advantage of SOX is investor protection. Disadvantages are: high cost of compliance, constraints on the managers' ability to conduct business and might also hinder the development of human capital in the firm.

Type: Medium

70. *(p. 26)* Briefly explain the major provisions of the Sarbanes-Oxley Act of 2002 (SOX)

Sarbanes-Oxley Act of 2002 deals with auditor oversight, accounting and reporting, and corporate governance. An important provision deals with increased level of accountability required of the corporate officers. The Act requires a public company's principal executive officer (CEO) and principal financial officer (CFO) to personally certify that, to the best of their knowledge, the company's financial statements filed with SEC are accurate and complete. Failure to meet these requirements can lead to significant consequences for a company's CEO and CFO. Another important provision deals with compliance. The Act requires that managers state their responsibility for establishing and maintaining adequate internal controls for financial reporting. The cost of compliance could be quite high.

Type: Difficult

71. *(p. 26)* What are the main purposes of the Sarbanes-Oxley Act of 2002 (SOX)?

The purposes of Sarbenes-Oxley Act (SOX) are to: (1) increase the role and authority of independent directors, (2) give shareholders more opportunity to monitor and participate in the governance of companies, and (3) establish new controls and enforcement mechanisms.

Type: Difficult

72. *(p. 26)* What is Toyota's business philosophy?

Toyota's business philosophy is to achieve stable, long-term growth, through the development of business activities that contribute to society by recognizing the importance of harmonious relationships between individuals, society, the global environment, and the world economy. It is also to share the benefits of growth with everyone involved with the firm, including customers, shareholders, employees, and trading associates.

Type: Medium