

 <b>XLRI Jamshedpur</b> <i>School of Business &amp; Human Resources</i>		<b>FM&amp;B-17</b>	
<b>End Term Examination Solution</b>			
<b>Weightage</b>		<b>Duration</b>	<b>minutes</b>

Name \_\_\_\_\_

Roll No. \_\_\_\_\_

**INSTRUCTIONS**

1. **Closed Book Examination.**
2. **Answer all questions.**

You are not allowed to borrow book, paper, calculators, etc.

Anyone who resorts to unfair practices, as judged by the examiner, the minimum penalty will be zero in this segment of evaluation, while the maximum penalty could be expulsion from the institute. There will be no further warnings.

1. The consequences of missing a financial lease payment are \_\_\_\_\_ those of missing an interest or principal payment on debt.
  - A. less severe than
  - B. the same as**
  - C. more severe than
  - D. unrelated to
2. Convertible bonds have all of the following characteristics EXCEPT
  - A. conversion increases the firm's debt ratio.**
  - B. less expensive form of financing than straight bonds.
  - C. enhanced marketability.
  - D. a call feature.
3. A firm currently has outstanding a 5 percent, \$1,000 convertible bond. The bond is convertible into 25 shares of common stock and callable at \$1,050. The current market price of the firm's stock is \$41 per share. The bond holder will most likely
  - A. allow the call to be exercised.**
  - B. convert the bond into stock.
  - C. sell the bond on the secondary market.
  - D. do nothing and wait until the stock price goes up further.
4. A warrant is attached to a \$1,000 par, 10 percent, 10-year bond, paying annual interest and having 20 warrants attached for the purchase of the firm's stock. The bonds were

initially sold for \$1,200. When issued, similar risk, straight bonds were selling at a 14 percent rate of return. The implied price of the warrant is

- A. \$10.40.
  - B. \$20.40.**
  - C. \$10.00.
  - D. \$20.00
5. Advantages of leasing from the lessee's perspective include all of the following EXCEPT
- A. capability of effectively depreciating land.
  - B. ability to avoid restrictive covenants that are normally part of a long term loan.
  - C. benefit of the salvage value at the end of the term of the lease reverts to the lessor.**
  - D. 100 percent financing.
6. Convertible preferred stock and convertible bonds are normally convertible over \_\_\_\_\_, respectively.
- A. a limited time period and an unlimited time period
  - B. an unlimited time period and a limited time period**
  - C. a limited time period and a limited time period
  - D. an unlimited time period and an unlimited time period
7. A firm has an outstanding 15-year convertible bond issue with a \$1,000 par value and a stated annual interest rate of seven percent. The bond is convertible into 50 shares of common stock which has a current market price of \$15. A straight bond could have been sold with a 10 percent stated interest rate. The market value of the bond is
- A. \$750.
  - B. \$771 at the minimum.**
  - C. \$1,250 at the minimum.
  - D. \$1,000.
8. A \_\_\_\_\_ permits the firm to raise additional funds at some point in the future by selling common stock and thereby shifting the firm's capital structure to a less highly levered position.
- A. put option
  - B. stock-purchase warrant**
  - C. conversion feature
  - D. repurchase agreement
9. Disadvantages of leasing from the lessee's perspective include all of the following EXCEPT
- A. the return to the lessor is quite high.
  - B. prohibition on leasehold improvements.
  - C. under a financial lease, an asset may subsequently become obsolete.
  - D. the maximum claim of the lessor in the event of bankruptcy is three years of lease payments.**

10. When the price of the firm's common stock \_\_\_\_\_ the conversion price, the market price of the convertible security will normally \_\_\_\_\_ to a level close to its conversion value.
- A. falls below; rise
  - B. rises above; fall
  - C. rises above; rise**
  - D. equals; fall
11. A firm has an outstanding 15-year convertible bond issue with a \$1,000 par value and a stated annual interest rate of seven percent. The bond is convertible into 50 shares of common stock which has a current market price of \$25. A straight bond could have been sold with a 10 percent stated interest rate. The conversion value of the bond is
- A. \$1,328.
  - B. \$1,250.**
  - C. \$1,000.
  - D. \$ 771.
12. The similarities of a right and a warrant include all of the following EXCEPT
- A. they both give the holder an option to acquire a certain number of shares of common stock at a specified price.
  - B. they both result in new equity capital for the firm.
  - C. they are both issued with exercise or subscription prices below the prevailing market price of stock.**
  - D. they both may be traded independently from the security to which they were attached.
13. All of the following must be considered when making a lease-versus-purchase decision EXCEPT
- A. the after-tax cash flows for each year under the lease alternative.
  - B. the after-tax cash flows for each year under the purchase alternative.
  - C. the present value of all cash flows.
  - D. the depreciation expense under the lease.**
14. Many holders of convertible bonds will not convert when the firm's common stock price exceeds the conversion price because
- A. the common stock price may go up further.
  - B. they already have the market price benefit and may still receive fixed periodic interest payments.**
  - C. of the dilution of EPS.
  - D. interest payments are tax deductible.
15. A firm has an outstanding bond with a \$1,000 par value that is convertible at \$40 per share of common stock. If the current market value of common stock per share is \$45, the conversion value of the bond is
- A. \$ 880.

- B. \$1,000.
- C. \$1,125.**
- D. \$1,200.

16. A firm needs \$2 million of new long-term financing. The firm is considering the sale of common stock or a convertible bond. The current market price of the common stock is \$42 per share. To sell this new issue, the stock would have to be underpriced by \$2 and sold for \$40 per share. The firm currently has 300,000 shares of common stock outstanding. The alternative is to issue 20-year, 10 percent, and \$1,000 par-value convertible bonds. The conversion price would be set at \$50 per share, and the bond could be sold at par. The earnings for the firm are expected to be \$500,000 in the coming year. Assuming the firm chooses the sale of common stock, the earnings per share in the coming year will be \_\_\_\_\_.

- A. \$1.43**
- B. \$1.44
- C. \$1.45
- D. \$1.47

17. The effect of exercising a warrant on the firm's capital structure reduces leverage \_\_\_\_\_ converting a convertible security.

- A. less than**
- B. as much as
- C. more than
- D. without relationship to

18. FASB Standard No. 13 establishes requirements for the explicit disclosure of certain types of lease obligations on the firm's balance sheet. To qualify as a capital lease, any of the following elements may be present EXCEPT

- A. the lease transfers ownership of the property to the lessee by the end of the lease.
- B. the lease contains an option to purchase the property at a "bargain" price.
- C. the lease term is less than 75 percent of the economic life of the property.**
- D. at the beginning of the lease, the present value of the lease payment is equal to 90 percent or more of the fair market value of the leased property less any investment tax credit received by the lessor.

19. The call price of the security generally exceeds the security's par value by an amount equal to

- A. one year's stated interest.**
- B. the straight bond value.
- C. the market value of one share of common stock.
- D. the market premium.

20. A firm has an outstanding bond with a \$1,000 par value that is convertible into 50 shares

of common stock. The bond's conversion ratio is

- A. 20.
- B. 25.
- C. 50.**
- D. 100.

21. A firm needs \$5 million of new long-term financing. The firm is considering the sale of common stock or a convertible bond. The current market price of the common stock is \$65 per share. To sell this new issue, the stock would have to be underpriced by \$2 and sold for \$63 per share. The firm currently has 600,000 shares of common stock outstanding. The alternative is to issue 20-year, 10 percent, and \$1,000 par-value convertible bonds. The conversion price would be set at \$73 per share, and the bond could be sold at par. The earnings for the firm are expected to be \$4,000,000 in the coming year. Assuming the firm chooses the convertible bond, the earnings per share after all bonds are converted will be \_\_\_\_\_.

- A. \$6.67
- B. \$5.98**
- C. \$5.91
- D. \$5.88

22. A firm has outstanding warrants that are exercisable at \$53 per share and entitle holders to purchase two shares of common stock. The common stock is currently selling for \$55 per share. The theoretical value of the warrant is

- A. \$1.
- B. \$2.
- C. \$3.
- D. \$4.**

23. FASB Standard No. 13 requires explicit disclosure of \_\_\_\_\_ obligation on the firm's balance sheet. For this type of lease, the present value for all of its payments is shown as an asset and the total lease payment obligation is included as a liability on the firm's balance sheet.

- A. an operating lease
- B. a leveraged lease
- C. a sale-leaseback
- D. a capital lease**

24. The call privilege is generally not exercised until the conversion value of the security is \_\_\_\_\_ the call price.

- A. 5 to 10 percent below
- B. equal to
- C. 10 to 15 percent above**
- D. 25 to 30 percent above

25. A firm has an outstanding bond with a \$1,000 par value that is convertible into 50 shares of common stock. The bond's conversion price per share is
- A. \$ 20.
  - B. \$ 25.
  - C. \$ 50.
  - D. \$100.
26. A firm needs \$1.5 million of new long-term financing. The firm is considering the sale of common stock or a convertible bond. The current market price of the common stock is \$16 per share. To sell this new issue, the stock would have to be underpriced by \$1 and sold for \$15 per share. The firm currently has 600,000 shares of common stock outstanding. The alternative is to issue 30-year, 8 percent, and \$1,000 par-value convertible bonds. The conversion price would be set at \$20 per share, and the bond could be sold at par. The earnings for the firm are expected to be \$700,000 in the coming year. Which plan results in less dilution of the earnings per share?
- A. the common stock with an eps of \$1.17
  - B. the convertible bond with an eps of \$1.04**
  - C. the common stock with an eps of \$1.00
  - D. the convertible bond with an eps of \$1.00
27. The market value of a warrant is generally \_\_\_\_\_ the theoretical value of the warrant.
- A. below
  - B. equal to
  - C. above**
  - D. not related to
28. When a call is made on a convertible security, the holder of the security will most likely
- A. not take any action.
  - B. allow the call to be exercised and accept the call premium.
  - C. convert the security into common stock.**
  - D. sell the security in the secondary market.
29. A firm has an outstanding bond with a \$1,000 par value that is convertible at \$40 per share of common stock. The bond's conversion ratio is
- A. 20.
  - B. 25.**
  - C. 40.
  - D. 50.
30. The key motives for using convertible securities in the firm's financing mix include all of the following EXCEPT
- A. a form of deferred stock financing.
  - B. a sweetener for financing.
  - C. a method of raising temporarily cheap funds.

**D. an eventual shift in the capital structure to a more levered position.**

31. The market value of a convertible bond will exceed the conversion value or straight bond value, whichever is greater, by an amount called the market premium. This premium exists because
- A. markets are efficient.
  - B. buyers and sellers do not usually agree on the conversion value.
  - C. purchasers expect future stock price movements to be positive.**
  - D. the straight bond value is close to the conversion value.
32. When warrants are exercised,
- A. only the number of common shares outstanding increases.**
  - B. debt is reduced.
  - C. debt is reduced while common equity increases.
  - D. there is no effect on the firm's capital structure.
33. All of the following are true of calls and puts EXCEPT
- A. options are issued by businesses.**
  - B. the presence of options trading in the firm's stock could, by increasing trading activity, stabilize the firm's share price in the marketplace.
  - C. options are not a source of funding to the corporation.
  - D. the financial manager of a corporation has very little need to deal with options.
34. From the firm's point-of-view, the issuance of convertible bonds has all of the following advantages EXCEPT
- A. a temporary source of cheap funds.
  - B. tax-deductible interest payments.
  - C. the deferred sale of common stock.
  - D. upon conversion, an increase in financial leverage.**
35. A firm has an outstanding 15-year convertible bond issue with a \$1,000 par value and a stated annual interest rate of seven percent. The bond is convertible into 50 shares of common stock which has a current market price of \$25. A straight bond could have been sold with a 10 percent stated interest rate. The straight value of the bond is
- A. \$1,328.
  - B. \$1,250.
  - C. \$1,000.
  - D. \$ 771.**
36. As the price of the underlying stock rises above the exercise price of a warrant, the investor's ability to earn larger potential return diminishes. Therefore, the warrant premium will
- A. increase.

- B. decrease.**  
C. remain unchanged.  
D. double.
37. Which of the following statements about put and call options is false
- A. They are traded on organized exchanges.  
**B. They are a form of deferred equity financing by the firm.**  
C. They can be used to lock in a gain or prevent a loss on a stock holding.  
D. They provide the buyer with an opportunity to earn larger returns than simply buying or selling common stock.
38. All of the following are true of stock-purchase warrants EXCEPT
- A. when a firm makes a large issue of debt, the attachment of stock-purchase warrants may add to the marketability of the issue.  
B. warrants are similar to conversion features on debt.  
**C. suppliers of debt are more likely to require warrants on an issue of debt from an existing corporation than from a new firm.**  
D. the attachment of warrants may lower the required interest rate.
39. A \_\_\_\_\_ permits the firm's capital structure to be changed without increasing the total financing.
- A. put option  
B. stock-purchase warrant  
**C. conversion feature**  
D. repurchase agreement
40. A firm currently has outstanding a 9 percent, \$1,000 convertible bond. The bond is convertible into 100 shares of common stock at a conversion price of \$10 per share and callable at \$1,090. The current market price of the firm's stock is \$12 per share. The bond holder will most likely
- A. allow the call to be exercised realizing \$90 over par value.  
**B. convert the bond into stock realizing \$200 over par value.**  
C. convert the bond into stock realizing only par value.  
D. do nothing and wait until the stock price goes up further.
41. Jeanette just purchased a European call on 100 shares of Delta stock. The call has an exercise price of \$30 and an expiration date of June 20. Delta stock is currently trading at \$32 a share. Which one of the following statements is correct concerning this call?
- A. Jeanette can buy 100 shares of Delta stock for \$30 a share anytime between now and June 20.  
B. Jeanette is obligated to buy 100 shares of Delta stock at \$30 a share if the option is exercised.  
C. Jeanette is obligated to sell 100 shares of Delta stock at \$30 a share if the option is exercised.  
**D. Jeanette can purchase 100 shares of Delta stock for \$30 a share**

**only on June 20.**

42. JKL stock is selling for \$43 a share. Which of the following statements are correct concerning an American call option on JKL stock which expires today?
- I. If the exercise price of the option is \$45, the call is in-the money.
  - II. The calls with both \$45 and \$50 exercise prices have the same expiration value.
  - III. A call with a \$40 exercise price is worth \$3 if exercised today.
  - IV. The \$30 call option is worth more than the \$35 call option.
- A. I and II only
  - B. II and III only
  - C. III and IV only
  - D. II, III, and IV only**
43. ZX stock is currently selling for \$52 a share. The value of a 3- month American call option on ZX with an exercise price of \$50 a share will:
- A. increase by \$1 if the stock price decreases by \$1.
  - B. increase by \$1 if the stock price increases by \$3.
  - C. decrease by \$1 if the stock price decreases by \$1.**
  - D. decrease by \$5 if the stock price decreases by \$5.
44. Marti owns a European call option on SK stock with an exercise price of \$45. She believes that SK stock will either be worth \$40 or \$50 per share on the expiration date. If Marti is correct, her option will either be worth \_\_\_\_\_ or \_\_\_\_\_, respectively, per share of SK stock at expiration.
- A. -\$5; \$0
  - B. -\$5; \$5
  - C. \$0; \$5**
  - D. \$5; \$0
45. The buyer of a(n) \_\_\_\_\_ has the right, but not the obligation, to buy an asset on a specified date for a specified price.
- A. American put option
  - B. American call option
  - C. European put option
  - D. European call option**
46. The buyer of a(n) \_\_\_\_\_ has the right, but not the obligation, to sell an asset on or before a specified date for a specified price.
- A. American put option**
  - B. American call option
  - C. protective put
  - D. European put option
47. CeeCi purchased shares of TK stock for \$21 a share. TK stock is currently selling for \$41 a share. CeeCi does not want to sell her shares of TK as she feels the stock will

continue to increase in price until it reaches \$50. However, CeeCi would like to protect the profits she currently has in the stock. CeeCi should:

- A. buy a call option with an exercise price of \$40.
- B. sell a call option with an exercise price of \$50.
- C. buy a put option with an exercise price of \$40.**
- D. sell a put option with an exercise price of \$40.

48. Rob owns a European put option on MO stock with an exercise price of \$35. At expiration, this put will be worth \_\_\_\_\_ if MO is selling at \$33 a share or \_\_\_\_\_ if MO is selling at \$37 a share.

- A. -\$2; \$0
- B. -\$2; \$2
- C. \$0; \$2
- D. \$2; \$0**

49. Tom writes an American put on GH stock at an exercise price of \$25 and an expiration date of February 18. Today is January 30 and GH stock is selling for \$22 a share. Which of the following statements must be correct?

- I. Tom will have a payoff of \$3 a share at expiration.
- II. If Tom exercises his put today; he will earn \$3 a share.
- III. Tom must buy GH stock at \$25 a share if the put is exercised.
- IV. If GH stock is selling for \$22 at expiration; the put will not be exercised.

- A. III only**
- B. IV only
- C. I and II only
- D. I, II, and III only
- E.

50. WW stock is currently selling for \$36 a share. Lester would like to own some WW stock but is unwilling to pay that much per share to do so. Lester should consider \_\_\_\_\_ with a strike price of \_\_\_\_\_ per share of stock.

- A. buying a call; \$40
- B. buying a put; \$35
- C. buying a put; \$40
- D. selling a put; \$35**

51. Which one of the following generally represents the largest portion of the compensation provided to the highest paid corporate CEOs?

- A. long-term compensation
- B. retirement contributions
- C. options**
- D. employer provided insurance benefits

52. Ms. Senior Manager was just granted some stock options by her employer. How is the face value of those options computed?

- A. Number of options  $\times$  Par value of stock

- B. **Number of options × Stock price**  
C. Number of options × Book value per share  
D. Number of options × (Stock price – Par value per share)
53. Which one of the following is generally true at the time stock options are granted to a corporate executive?
- A. The options are deeply out of the money.  
B. The exercise price of the options is equal to the book value of the stock.  
C. The exercise price of the options is equal to the difference between the market price and the book value of the stock.  
D. **The exercise price of the options is equal to the market price of the stock.**
54. Which one of the following correctly states a reason for granting at the money stock options to a company executive?
- A. At the money stock options are taxed when issued based on the at the money option value.  
B. **Stock options help ensure the executive makes decisions based on the best interests of the shareholders.**  
C. Stock options increase the base pay of the executive which lowers the taxable income of the firm.  
D. Stock options guarantee a base amount of compensation to the executive.
55. Which one of the following is correct concerning the granting of stock options by corporations?
- A. Stock options granted to company executives must be issued out of the money.  
B. Corporations are restricted to granting stock options only to individuals holding positions at the vice-president level and above.  
C. The option exercise price is generally ten percent above the stock price when an option is granted to a company executive to encourage the executive to improve company profits.  
D. **Stock options can be awarded to an employee irrespective of his or her position or level of compensation.**
56. Which one of the following terms is defined as the period of time between the date when an executive is granted stock options and the date on which the executive is granted the right to exercise those options?
- A. exercise period  
B. grant period  
C. out of the money period  
D. **freeze-out period**
57. Connie Roach is the CEO of Movers United. She was recently granted one million European at the money stock options. The average stock price on the date of the grant was \$42.15. The options expire in six years, the continuously compounded interest rate is

- 4.5 percent, and the variance of the stock is .0576. What is the total value of Ms. Roach's stock options based on the Black-Scholes model?
- A. \$11.79 million
  - B. \$12.33 million
  - C. \$13.87 million
  - D. \$14.44 million**
58. Mr. Alexander Hamilton was granted 3 million European stock options this morning as part of his CEO compensation package. The options expire in five years and were issued at the money based on the current stock price of \$48.30. The variance of the stock is .042025 and the continuously compounded interest rate is five percent. What is the total value of the options Mr. Hamilton received?
- A. \$39.86 million
  - B. \$42.70 million**
  - C. \$43.08 million
  - D. \$43.56 million
59. Mrs. Tracy is the CFO of West Coast Insurance. Last week, the firm granted her 15,000 European at the money options. The average stock price when the options were granted was \$21.60. The continuously compounded interest rate is 5.2 percent. The options expire in seven years and the stock has a variance of .051984. What is the value of each option?
- A. \$8.37**
  - B. \$8.82
  - C. \$9.01
  - D. \$9.47
60. Blue Bird Flights just issued 10,000 European options to its CEO. The options expire in four years and have an exercise price that equaled the average stock price of \$18 at the time of issuance. The variance of the stock is .026244 and the continuously compounded interest rate is 4 percent. What is the value of these options to the CEO?
- A. \$2.42
  - B. \$3.09
  - C. \$3.73**
  - D. \$4.16
61. Which one of the following definitions is correct?
- A. Speculating is the use of derivatives to reduce a firm's risk exposure.
  - B. Hedging is the reduction of risk exposure through the use of derivatives.**
  - C. A forward contract is the payment for a good today with the delivery of the good occurring sometime in the future.
  - D. A derivative is a financial instrument whose value becomes the basis for the value of another financial instrument.
62. Which one of the following statements concerning a forward contract is correct?
- A. The seller of a forward contract only agrees to make delivery

- some time in the future.
- B. The cash payment that will be made when the item being purchased is delivered is referred to as the deliverable instrument.
  - C. The buyer of a forward contract only agrees to pay a stated amount some time in the future.
  - D. If you order a wedding cake today to be delivered and paid for on your wedding day six months from now, you have agreed to a forward contract.**
63. On April 15 you go to your local furniture store. The sofa you want is not in stock but the store agrees to order it for you and tells you that the price will be \$1,200. No deposit is required for this order. Which one of the following statements correctly describes some aspect of this forward contract?
- A. The \$1,200 is the deliverable instrument.
  - B. You pay the \$1,200 when you agree to the forward contract.
  - C. The store is the buyer of the forward contract.
  - D. You are the buyer of the forward contract.**
64. A forward contract:
- A. is a type of option.
  - B. grants the buyer a choice as to whether or not the exchange will occur once the specified future date arrives.
  - C. is a type of cash transaction.
  - D. can be either an oral or a written agreement.**
65. Which of the following represent differences between a forward contract and a futures contract?
- I. A futures contract only specifies the month of delivery whereas a forward contract specifies the date of delivery.
  - II. A forward contract is traded on an exchange while a futures contract is not.
  - III. With a futures contract, but not with a forward contract, the party which takes delivery may not be the original party which entered the contract with the seller.
  - IV. Forward contracts are marked to the market daily whereas futures contracts are not.
- A. III only
  - B. I and III only**
  - C. II and IV only
  - D. III and IV only
66. Which of the following represent advantages that futures contracts have that forward contracts may not have?
- I. predetermined set of cash flows
  - II. ability to net out a position
  - III. individually customized contract terms
  - IV. liquidity
- A. I only
  - B. I and III only
  - C. II and IV only**
  - D. I and II only
67. Tom buys a futures contract on 5,000 bushels of corn at a price of \$5.03 a bushel. The

contract expires in two months. Tom will:

- A. **most likely both submit and receive cash payments during the two month period.**
  - B. pay an unknown total amount for the corn due to the daily marking to the market.
  - C. pay an unknown total amount for the corn but the total price cannot exceed \$5.03 a bushel.
  - D. pay \$25,150 for the corn on the date the corn is delivered.
68. On Monday, Jennie purchased a 3-month futures contract on corn at a price of \$4.96 a bushel. On Tuesday, the price of corn rose to \$4.98 a bushel and on Wednesday the price fell back to \$4.96. Which one of the following statements reflects the effects of these price changes?
- A. Jennie can ignore any price movements as she purchased the corn at an agreed upon price of \$4.96 a bushel.
  - B. **Jennie can ignore the price movement on Tuesday because the price returned to her contracted amount of \$4.96 a bushel on Wednesday.**
  - C. Jennie will pay \$0.02 a bushel to her broker on Wednesday for the price movement on Tuesday.
  - D. Jennie will receive \$0.02 a bushel from her broker on Thursday for the price movement on Wednesday.
69. Assume you sell a futures contract on Monday for one bushel of wheat which is to be delivered on Friday. The contract price per bushel is \$4.98. As a result of the marking to market process, you receive \$0.01 a bushel for Tuesday, receive \$0.04 a bushel for Wednesday, and pay \$0.03 a bushel for Thursday. How much will you receive per bushel when you take delivery on Friday?
- A. **\$4.95**
  - B. \$4.96
  - C. \$4.98
  - D. \$5.00
70. Sue entered a forward contract to buy wheat at a price of \$5.10 a bushel. Ted purchased a futures contract on wheat at a price of \$5.10 a bushel. Which one of the following statements is correct?
- A. Sue will pay \$5.10 a bushel whereas Ted may pay less than that amount for his wheat.
  - B. **Both Sue and Ted have predetermined cash flows.**
  - C. Sue must be prepared to pay cash to her broker if the price of wheat falls prior to the time of delivery.
  - D. Sue must be prepared for payment on any day of the delivery month whereas Ted knows the exact day of delivery.