

考試科目	財務管理	所別	金融系	考試時間	月	日	上午	第	節
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Corporate Finance Page 7

44. The payoff diagram for a put with the same exercise price and premium as the call on the same underlying asset with the same maturity is:
- the inverse of the call diagram along the put price.
 - unrelated to the call diagram no matter what the exercise price.
 - the mirror image of the call diagram around the exercise price.
 - exactly the same as the call diagram for the given exercise price.
 - None of the above.
45. Kids Toy Co. has had total returns over the past five years of 0%, 7%, -2%, 10%, and 12%. What is the percentage change in wealth over the five years.
- 29%
 - 27%
 - 5.8%
 - 5.4%
 - none of the above

II. Essay:

46. Assume that you are facing an exclusive two-state situation **right a way**. State 1 will occur with probability P . If Mr. Johnson is willing to offer you two securities A and B, where A pays off \$1 in State 1 and \$0 in State 2, and B pays off \$2 in State 2 and 0 in State 1. How much are you willing to pay for buying one unit of A and B? Please give your reasons explicitly. (10 points)

考試科目	微積分	所別	金融所	考試時間	4月22日 上午 第 節 星期 日 (F) 3:20~5:00
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國立政治大學圖書館

壹、(10%) 1. Compute

$$\int_{-\infty}^{\infty} |x| \frac{1}{\sqrt{2\pi\sigma}} e^{-\frac{x^2}{2\sigma^2}} dx, \text{ where } \sigma \text{ is a positive number.}$$

(10%) 2. Find the solution (x, y, z) for the problem:

$$\text{Max } x^2 y^3 z \quad \text{subject to } x + y + z = 12$$

貳、(10%) 1. Find the limit of

$$\lim_{x \rightarrow \infty} \left(\sqrt[n]{x^n + a_1 x^{n-1} + \dots + a_{n-1} x + a_n} - x \right)$$

(15%) 2. Suppose that a firm earns a net profit $y(t)$ at each time $t \in [0, T]$. At time $s \in [0, T]$, the discounted value of future profit is

$$V(s, r) = \int_s^T y(t) e^{-r(t-s)} dt$$

where r is the constant interest rate.

(a) Compute $V'_s(s, r)$

(b) Solve r as a function of $V(s, r)$, $V'_s(s, r)$ and $y(s)$, then explain the result in terms of the optimal decision of the owner of the firm.

(15%) 3. Consider the system of equations:

$$xu^3 + v = y^2$$

$$3uv - x = 4$$

Compute u'_x .

參、(10%) 1. Find the general solution of

$$x_{t+2} - 5x_{t+1} + 6x_t = 2t - 3, \quad t = 0, 1, \dots$$

(10%) 2. Solve the following differential equation:

$$y'' + 2y' + y = t^2, \quad y(0) = 0, \quad y'(0) = 1$$

肆、(10%) 1. Let A be a 2×2 matrix for which $A^2 = 0$. Does the trace of A (the sum of diagonal elements of A) must be zero?

(10%) 2. Let $A = (a_{ij})_{n \times n}$ be a matrix where all column sums are 1, that is,

$$\sum_{i=1}^n a_{ij} = 1 \quad \text{for } j = 1, 2, \dots, n. \text{ what number must be an eigenvalue of } A? \text{ (You}$$

may consider the case $n = 2$, then generalize the result.)

備考	試題隨卷繳交
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考試科目	統計學	所別	金融系	考試時間	月 日 上午 第 節
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1. Two players, A and B, alternately and independently flip a coin and the first player to obtain a head wins. Assume player A flips first.
- (15) (a) If the coin is fair, what is the probability that A wins?
 (b) Show that for all p , $0 < p < 1$, where $p = P(\text{head})$, $P(\text{A wins}) > \frac{1}{2}$.
2. Let $X \sim \text{Poisson}(\theta)$, $Y \sim \text{Poisson}(\lambda)$ and X, Y are independent.
- (15) (a) Show that the conditional distribution of X given that $X+Y=n$ is Binomial (n, p) where $p = \frac{\theta}{\theta+\lambda}$
 (b) What is the conditional distribution of Y given $X+Y=m$
3. Let X_1, X_2, \dots, X_n be a random sample from the pdf
- $$f(x|\theta) = \theta x^{\theta-1} \quad 0 < x < 1 \quad \theta > 0$$
- (20) (a) Is $\sum_{i=1}^n X_i$ sufficient for θ ? Why or why not?
 (b) Find a complete sufficient statistic for θ
 (c) Find an UMVUE for θ
4. We obtain observations Y_1, Y_2, \dots, Y_n which can be described by the relationship
- $$Y_i = \theta X_i^2 + \epsilon_i$$
- where X_1, \dots, X_n are fixed constants and $\epsilon_1, \dots, \epsilon_n$ are iid $N(0, \sigma^2)$
- (20) (a) Find the least squares estimator of θ
 (b) Find the MLE of θ
 (c) Is the MLE of θ unbiased? Why or why not?

5. A factorial experiment involving three levels of factor A and two levels of factor B resulted in the following data.

		Factor B			
		level 1	level 2	level 3	
(15)	Factor A	level 1	135 165	90 66	75 93
		level 2	125 95	127 105	120 136

Test for any significant main effects and any interaction.

Use $\alpha = .05$

Note:

	Denominator Degrees of Freedom	F.05, v_1, v_2											
		Numerator Degrees of Freedom											
		1	2	3	4	5	6	7	8	9	10	12	15
v_2	1	161.4	199.5	215.7	224.6	230.2	234.0	236.8	238.9	240.5	241.9	243.9	245.9
	2	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38	19.40	19.41	19.43
	3	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81	8.79	8.74	8.70
	4	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00	5.96	5.91	5.86
	5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77	4.74	4.68	4.62
	6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10	4.06	4.00	3.94
	7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68	3.64	3.57	3.51
	8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39	3.35	3.28	3.22
	9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18	3.14	3.07	3.01

6. A production line is designed on the assumption that the difference between mean assembly times for two operations is five minutes. Independent tests for the two assembly operations yield the following data.

(15)	Operations A	operations B
	$n_1 = 15$	$n_2 = 11$
	$\bar{x}_1 = 14.8$ minutes	$\bar{x}_2 = 10.4$ minutes
	$s_1 = .8$ minutes	$s_2 = .6$ minutes

(a) Using $\alpha = .05$, test the hypothesis that the difference between the mean assembly times is 5 minutes.

(b) Develop a 98% Confidence interval for the difference between the two population means.

Note:

	v Degrees of Freedom	$t_{\alpha, v}$ Area in Upper Tail					
		$\alpha = .10$.05	.025	.01	.005	
備	考	20	1.325	1.725	2.086	2.528	2.845
		21	1.323	1.721	2.080	2.518	2.831
命	題	22	1.321	1.717	2.074	2.508	2.819
		23	1.319	1.714	2.069	2.500	2.807
委	員	24	1.318	1.711	2.064	2.492	2.797
		25	1.316	1.708	2.060	2.485	2.787
命	題	26	1.315	1.706	2.056	2.479	2.779
		27	1.314	1.703	2.052	2.473	2.771
說	明	28	1.312	1.701	2.048	2.467	2.763
		29	1.311	1.699	2.045	2.462	2.756

16日

考試科目	經濟學(總體)	所別	金融所	考試時間	月	日	上午	第	節
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總體：

一、凱因斯認為貨幣無法影響產出，是受到二個陷阱的影響，一個是流動性陷阱，一個是投資性陷阱。

- (a) 請用文字簡單說明二者之意義。
 (b) 用教科書常用的四格圖形畫出其圖形。
 (c) 用你的(b)觀念，說明下列何者較有可能在流動性陷阱？
- (i) $\ln M^d = 3.1 + 1.06 \ln Y - 0.12i$
 (ii) $\ln M^d = 2.7 + 1.03 \ln Y - 0.01i$

(25%)

二、解釋名詞

- (a) 何謂通貨膨脹 (inflation) ?
 (b) 用(a)的定義方式，說明何謂通貨緊縮 (deflation) ?
 (c) 用你的(b)說明台灣目前是否有通貨緊縮？

(25%)

備 考 試 題 隨 卷 繳 交

命 題 委 員：

-bb-

(簽 章)

年 月 日

日

考試科目	經濟學	所別	金融	考試時間	月 日 上 午 第 節	星期 下
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- 三、You are planning to invest in fine wine. Each case costs \$100, and you know from experience that the value of a case of wine held for t years is $(100)t^{0.5}$. One hundred cases of wine are available for sale and the interest rate is 10%.
- How many cases should you buy, how long should you wait to sell them, and how much money will you receive at the time of their sale? (10 分)
 - Suppose that at the time of purchase, someone offers you \$130 per case immediately. Should you take the offer? (5 分)
 - How would your answers change if the interest rate were only 5%? (10 分)

- 四、Two used car dealers compete side by side on a main road. The first, Harry's Cars, sells high-quality cars that it carefully inspects and, if necessary, services. It costs Harry's, on average, \$8,000 to buy and service each car that it sells. The second dealership, Lew's Motors, sells lower-quality cars. It costs Lew's on average only \$5,000 for each car that it sells. If consumers knew the quality of the used cars they were buying, they would gladly pay \$10,000 on average for cars Harry's sells and pay only \$7,000 on average for the cars Lew's sells.

Unfortunately, the dealerships are too new to have established reputations, so consumers don't know the quality of each dealership's cars. Consumers shopping at these dealerships figure that they have a 50-50 chances of ending up with a high-quality car, no matter which dealership they go to, and hence are willing to pay \$8,500 on average for a car.

Harry's has an idea — it will offer a bumper-to-bumper warranty for all the cars it sells. It knows that a warranty lasting Y years will cost $\$500Y$ on average, and it also knows that if Lew's tries to offer the same warranty, it will cost Lew's $\$2,000Y$ on average.

- Suppose Harry's offers a one-year warranty on all the cars it sells. Will this generate a credible signal of quality? Will Lew's match the offer, or will it fails to match it so that consumers can correctly assume that because of the warranty, Harry's cars are high quality and hence worth \$10,000 on average. (10 分)
- If Harry's offers a two-year warranty on its cars, will this generate a credible signal of quality? What about a three-year warranty? (10 分)
- If you were advising Harry's, how long a warranty would you urge it to offer? Explain why? (5 分)

備 考 試 題 隨 卷 繳 交

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Corporate Finance Page 1

Warning:

A. This test has 45 multiple choice questions (each question has only one correct answer, total 90 points) and 1 essay question (10 points)

B. Please write your answers on the **ANSWER BOOKLET**.

I. Multiple Choice

- The Tip-Top Paving Co. has an equity cost of capital of 16.97%. The debt to value ratio is .6 and a cost of debt of 11%. What is the cost of equity if Tip-Top was unlevered?
 - 3.06%
 - 14.0%
 - 0.08%
 - 16.97%
 - none of the above.
- Apple Computer discontinued their dividend in 1996 because:
 - there was a large need to reinvest to fund growth.
 - licensing the Mac operating system did not increase market share and sales dropped.
 - of large operating losses and the need to conserve capital.
 - a and c.
 - b and c
- In the One Factor (APT) Model, the characteristic line to estimate β_i passes through the origin, unlike the estimate used in the CAPM because:
 - the relationship is between the actual return on a security and the market index.
 - the relationship measures the change in the security return over time versus the change in the market return.
 - the relationship measures the change in excess return on a security versus GNP.
 - the relationship measures the change in excess return on a security versus the change in the factor about its mean of zero.
 - cannot be determined without actual data.
- Stock attributes can be used to characterize portfolio management styles as well as estimating returns. Portfolios with:
 - low P/Es are aggressive while high P/E portfolios are growth oriented.
 - high P/Es are aggressive while low P/E portfolios are growth oriented.
 - low P/Es are value funds while high P/E portfolios are growth funds.
 - high P/Es are value funds while low P/E portfolios are growth funds.
 - low P/Es can not be distinguished from high P/E portfolios.
- When a security is added to a portfolio the appropriate return and risk contributions are:
 - the expected return of the asset and its standard deviation.
 - the most probable return and the beta.
 - the expected return and the beta.
 - the most probable return and the beta.
 - these both can not be measured.
- Which of the following factors influence the choice between merger and an acquisition of stock?
 - Shareholders are dealt with directly to bypass target management and board of directors.
 - In a tender offer, usually some minority shareholders do not tender stopping complete firm absorption.
 - Target management may be unfriendly and resist an offer. Resistance usually make the stock price higher.
 - all of the above.
 - none of the above.
- Large business combinations in Japan are normally carried out through reciprocal ownership of common stock. These networks, or keiretsu, involve a large number of diversified companies centered around a large bank, industrial firm or trading firm. One of the main benefits of this structure is argued to be:
 - the monopolistic control of economic segments.
 - the reduction of financial distress costs due to ease of restructuring an agreement.
 - large scale diversification that can not be done by individual shareholders.
 - greater efficiency in management because the management skills are homogeneous even for diversified industries.
 - none of the above.

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8. Which of the following is not normally an example of the services offered by investment bankers?
 - A) Aiding in the sale of securities.
 - B) Facilitating mergers.
 - C) Acting as brokers to both individuals and institutional clients.
 - D) Offering checking accounts to corporations.
 - E) Both c and d.
9. The Branch Company's debtholders are promised payments of \$25 if the firm does well, but will receive \$20 if the firm does poorly. The expected earnings if the firm does poorly are \$20. The probability of the firm performing poorly or well is 50%. If Branch's bonds are selling at a price of \$20, and the interest rate on the bonds is 10%, then the cost of bankruptcy can be estimated at:
 - A) \$ 0.00.
 - B) \$20.00.
 - C) \$ 0.45.
 - D) \$ 2.45.
 - E) \$ 7.45.
10. If a firm holds the dividend payout, the debt to equity ratio and outstanding shares constant while maintaining income and assets proportional to sales, the plug variable is:
 - A) short term debt.
 - B) retained earnings.
 - C) sustainable growth.
 - D) long term debt.
 - E) accounts receivable.
11. Aunt Clarisse has promised to leave you \$60 a year starting next year and have it increase at 4% a year thereafter. The payments are expected to go on indefinitely. How much has Aunt Clarisse left you if your opportunity costs is 9%.
 - A) \$ 693.33.
 - B) \$1200.00.
 - C) \$1248.00.
 - D) \$ 666.67
 - E) None of the above.
12. Corporate securities are contingent claims because:
 - A) they don't represent a direct claim on the firm.
 - B) the firm may be bought out.
 - C) the securities value is derived from the total value of the firm.
 - D) book value can be negative.
 - E) none of the above
13. In the presence of personal taxes the MM irrelevance proposition does not hold because:
 - A) managers have an incentive to seek alternative uses for these funds.
 - B) personal taxes always increase the value of dividends.
 - C) personal taxes reduce the value of dividends but are not sufficient to eliminate all dividends.
 - D) a and b.
 - E) a and c
14. If the expected market return is 14% and the risk free rate is 6%, what is the expected return of the newly created portfolio of Top Black and the market index fund?
 - A) 20.00%.
 - B) 11.92%.
 - C) 17.76%.
 - D) 11.76%.
 - E) 12.72%.

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Corporate Finance Page 3

Use the following to answer question 15:

The Hifalutin Co. has perpetual EBIT of \$3,000. It has no debt in its capital structure, and its cost of equity is 15%. The corporate tax rate is 40%. There are 300 shares outstanding. Hifalutin has announced that it will borrow \$3,750 in perpetual debt at 8% and use the proceeds to buy up stock.

15. Assume the corporate tax rate is 50%. firm has perpetual expected EBIT of \$100. The firm has no debt in its capital structure. Its cost of equity is 10%. What would be the value of the firm if it issued \$400 in perpetual debt?
 - A) \$7
 - B) \$8
 - C) \$9
 - D) Insufficient information.
 - E) None of the above.
16. In an EPS-EBI graphical relationship, the debt ray and equity cross. At this point the equity and debt are:
 - A) equivalent with respect to EPS but above and below this point equity is always superior.
 - B) at breakeven in EPS but above this point debt increases EPS via leverage and decreases EPS below this point.
 - C) equal but away from breakeven equity is better as fewer shares are outstanding.
 - D) at breakeven and MM Proposition II states that debt is the better choice.
 - E) at breakeven and debt is the better choice below breakeven because small payments can be made.
17. Question: Firm A does well in a boom economy. Firm B does well in a bust economy. The probability of a boom is 50%. The end of period values of the two firms depend on the economy as shown below:

<u>Economy</u>	<u>Probability</u>	<u>Value of A</u>	<u>Value of B</u>
Boom	.5	\$1,600	800
Bust	.5	800	2,000
Expected Value	\$1,200	\$1,400	

Both firms have debt outstanding with a face value of \$1,000. In order to diversify, the two firms have proposed a merger. The NPV of the merger is zero. Which of the following statements is correct?

 - A) The stockholders are indifferent to merger since the NPV is zero.
 - B) The bondholders are indifferent to merger since the NPV is zero.
 - C) The bondholders stand to gain because the risk of the combined firm is less.
 - D) The stockholders stand to gain because the probability of bankruptcy becomes zero after the merger.
 - E) More than one of the above is correct.
18. Which of the following amounts is closest to the end value of investing \$3,000 for 3/4 year at a continuously compounded rate of 12%?
 - A) \$3,163.
 - B) \$3,283.
 - C) \$3,263.
 - D) \$3,287.
 - E) \$3,317.
19. Sasha Corp. had an ROA of 8%. Sasha's profit margin was 4% on sales of \$150. What were total assets?
 - A) \$75.
 - B) \$300.
 - C) \$48.
 - D) \$162.
 - E) none of the above.
20. A growth stock portfolio and a value portfolio might be characterized
 - A) each by their P/E relative to the index P/E; high P/E for growth and lower for value.
 - B) as earning a high rate of return for a growth security and a low rate of return for value security irrespective of risk.
 - C) low unsystematic risk and high systematic risk respectively.
 - D) moderate systematic risk and zero systematic risk respectively.
 - E) none of the above.

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21. Given the following information, leverage will add how much value to the unlevered firm per dollar of debt?
 Corporate tax rate: 34%
 Personal tax rate on income from bonds: 10%
 Personal tax rate on income from stocks: 50%
- A) -\$0.188.
 B) \$0.340.
 C) \$0.633.
 D) -\$0.050.
 E) None of the above.
22. You already hold Top Black Asphalt Company as the only asset in your portfolio. If you want to realign your investments by putting 40% of your wealth in a market index fund what would the systematic risk of the portfolio be if the beta of Top Black is .74?
- A) .8.
 B) .84.
 C) .9.
 D) .6.
 E) .45.
23. Dividend paying stocks have:
- A) call options that are worth more because the holders receives more cash dividends.
 B) call options that are worth less because the holders do not receive the cash dividend.
 C) call options that are no different in value versus calls on no dividend paying stock.
 D) dividends are always worth more than non-dividends.
 E) none of the above.
24. Time preference refers to the fact that:
- A) corporations match current assets with current liabilities to minimize the chance of bankruptcy.
 B) corporations match both current and long-term assets with current and long-term liabilities to minimize the change of bankruptcy.
 C) investors prefer current cash flows to future cash flows.
 D) investors seek to time cash flows to minimize tax liabilities.
 E) none of the above
25. The Felix Corp. projects to pay a dividend of \$.75 next year and then have it grow at 12% for the next 3 years before growing at 8% indefinitely thereafter. The equity has a required return of 10% in the market. The intrinsic value of the stock is:
- A) \$ 41.52
 B) \$ 9.375.
 C) \$ 17.05.
 D) \$ 59.80.
 E) \$ 62.38.
26. When comparing two different production technologies, the firm with low operating leverage will have:
- A) a total cost line with a greater slope.
 B) a total cost line with a smaller slope.
 C) a greater change in EBIT for a given change in volume.
 D) a smaller change in EBIT for a given change in volume.
 E) both b and d.
27. Midget Co. has a profit margin on sales of 4% and a ROE of 18%. If Midget's debt-to-equity ratio is .8, what is the total asset turnover ratio?
- A) 2.500
 B) 5.625
 C) 2.000
 D) 10.125
 E) none of the above.

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28. Loughran and Ritter's study of Initial Public Offerings (IPOs) showed that the post offering stock performance was:
 - A) correctly priced at issuance because over the next five years the abnormal returns were zero on average.
 - B) incorrectly priced at issuance because over the next five years the abnormal returns were greater than zero on average.
 - C) immaterial to the pricing of the IPO because future market performance is unknown at issuance.
 - D) equal across IPOs, irrespective of risk or which year they were issued.
 - E) all of the above.
29. MM Proposition I with corporate taxes states that:
 - A) capital structure can affect firm value.
 - B) by raising the debt-to-equity ratio, the firm can lower its taxes and thereby increase its total value.
 - C) firm value is maximized at an all debt capital structure.
 - D) all of the above.
 - E) only two of the above.
30. At stage 2 of the decision tree it shows that if a project is successful the payoff will be \$53,000 with a 2/3 chance of occurrence. There is also the 1/3 chance of a -\$24,000 payoff. The cost of getting to stage 2 (1 year out) is \$44,000. The cost of capital is 15%. What is the NPV of the project?
 - A) -\$13,275.36
 - B) -\$20,231.89
 - C) \$ 2,086.96
 - D) \$ 7,536.23
 - E) Can not be calculated without the exact timing of future cash flows.
31. Collegiate Tuxedo rents apparel throughout the year. They have experienced non-payment by about 15% of their customers with an average loss of \$200. Collegiate wants to stem their losses by using getting an instant electronic credit check on the customer. These checks will cost them \$7 on each of the 1000 customers. The opportunity cost is 1.5% for the credit period. Should they pursue the credit check?
 - A) No, because the \$7000 cost is too high.
 - B) No, because a \$200 loss is minor.
 - C) Yes, because the net gain is \$30,000
 - D) Yes, because the net gain is \$23,000
 - E) Yes, because the net gain is \$193,000
32. LCP, a newly formed medical group, is currently paying dividends of \$.50. These dividends are expected to grow at a 20% rate for the next 5 years and at a 3% rate thereafter. What is the value of the stock if the appropriate discount rate is 12%?
 - A) \$ 8.08.
 - B) \$11.17.
 - C) \$14.22.
 - D) \$17.32.
 - E) \$30.90.
33. A security will have the risk-free return if that security has:
 - A) a zero beta.
 - B) neither systematic risk nor unsystematic risk.
 - C) no systematic risk.
 - D) no unsystematic risk.
 - E) both a & c are correct.
34. In the One Factor (APT) Model, the characteristic line to estimate β_i passes through the origin, unlike the estimate used in the CAPM because:
 - A) the relationship is between the actual return on a security and the market index.
 - B) the relationship measures the change in the security return over time versus the change in the market return.
 - C) the relationship measures the change in excess return on a security versus GNP.
 - D) the relationship measures the change in excess return on a security versus the change in the factor about its mean of zero.
 - E) cannot be determined without actual data.
35. If the total long term financing of the firm is greater than the total financing needs for part of the year and less than the needs for some of the year due to seasonal fluctuations the company will most likely:
 - A) hold excess cash.
 - B) borrow short term and hold excess cash.
 - C) hold excess cash and reduce business activities.
 - D) invest in marketable securities and borrow short term.
 - E) none of the above.

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36. Interest rate and currency swaps allow one party to exchange a:
 - A) floating interest rate or currency value for a fixed value over the contract term.
 - B) fixed interest rate or currency value for a lower fixed value over the contract term.
 - C) floating interest rate or currency value for a lower floating value over the contract term.
 - D) a fixed interest rate position for a currency position over the contract term.
 - E) none of the above.
37. Covariance measures the interrelationship between two securities in terms of:
 - A) both expected return and direction of return movement.
 - B) both size and direction of return movement.
 - C) the standard deviation of returns.
 - D) both expected return and size of return movements.
 - E) the correlations of returns.
38. If the use of supplier financing decreases and is replaced by cash financing for the same level of business activity, the cash cycle will:
 - A) increase because days in payables decrease.
 - B) stay the same because the change is only on the operating cycle.
 - C) decrease because days in payables decrease.
 - D) stay the same because business activity does not change.
 - E) stay the same because cash is used for payment.
39. The IRR decision rule can be reversed because:
 - A) the NPV rule is not the same as the IRR.
 - B) the IRR is based on a mutually exclusive investment.
 - C) instead of an investment project it is a financing project.
 - D) the IRR is greater than 100%.
 - E) none of the above.
40. Covariance measures the interrelationship between two securities in terms of:
 - A) both expected return and direction of return movement.
 - B) both size and direction of return movement.
 - C) the standard deviation of returns.
 - D) both expected return and size of return movements.
 - E) the correlations of returns.
41. A bottle of Dom Perignon is selling for 550FF in Paris and the exchange rate is \$.167/FF. The champagne is selling for \$95 on average in the U.S. exclusive of transportation cost. The price in the U.S. is:
 - A) priced just right.
 - B) is \$3.15 undervalued.
 - C) is \$3.15 overvalued.
 - D) the Law of One Price does not hold for special commodities like champagne.
 - E) None of the above.
42. The FTE approach has been used by the firm to value their capital budgeting projects. The total investment cost at time 0 is \$640,000. The company uses the FTE approach because they maintain a target debt to value ratio over project lives. The company has a debt to equity ratio of .5. The present value of the project including debt financing is \$810,994. What is the relevant initial investment cost to use in determining the value of the project?
 - A) \$640,000
 - B) \$170,994
 - C) \$267,628
 - D) \$543,366
 - E) \$372,372.
43. Which of the following would harm the position of a warrant holder?
 - A) a stock split of 3 for
 - B) a large stock dividend of 20%.
 - C) a large cash dividend.
 - D) listing of the warrants on the NYSE.
 - E) none of the above would harm the warrant holders.